ONLINE TOPIC ASSESSMENT

An auto-scored Topic Assessment is provided at PearsonRealize.com.

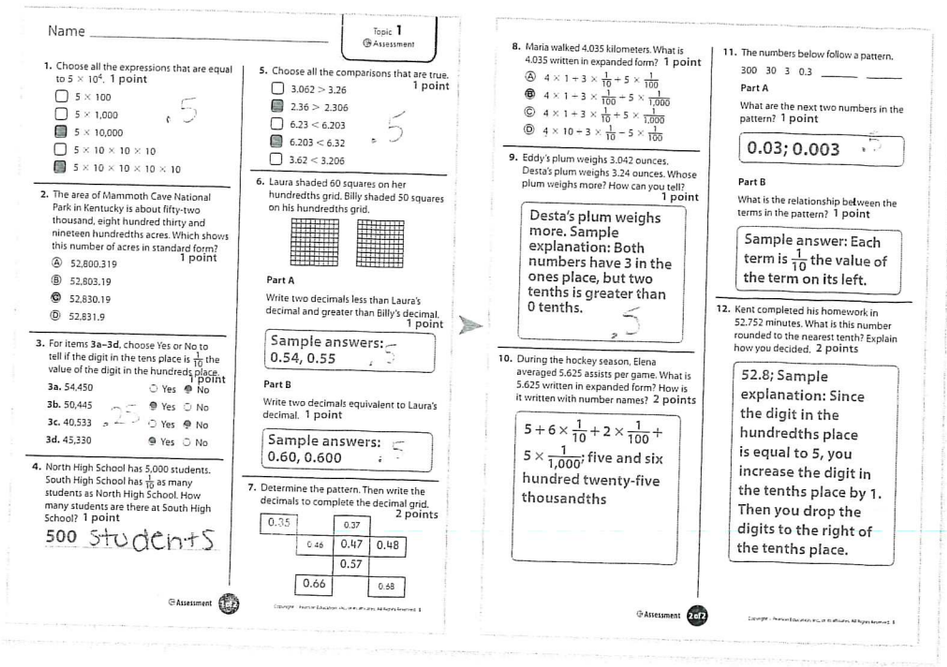
EXAMVIEW® TEST GENERATOR

ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize. PearsonRealize.com

Assessment

Topic Assessment Masters



Name _____ Topic 1 Assessment

1. Choose all the expressions that are equal to 5×10^4. 1 point
   - ☐ 5×100
   - ☐ $5 \times 1{,}000$
   - ☑ $5 \times 10{,}000$
   - ☐ $5 \times 10 \times 10 \times 10$
   - ☑ $5 \times 10 \times 10 \times 10 \times 10$

2. The area of Mammoth Cave National Park in Kentucky is about fifty-two thousand, eight hundred thirty and nineteen hundredths acres. Which shows this number of acres in standard form? 1 point
   - Ⓐ 52,800.319
   - Ⓑ 52,803.19
   - Ⓒ 52,830.19
   - Ⓓ 52,831.9

3. For items 3a–3d, choose Yes or No to tell if the digit in the tens place is $\frac{1}{10}$ the value of the digit in the hundreds place. 1 point
   - 3a. 54,450 ○ Yes ● No
   - 3b. 50,445 ● Yes ○ No
   - 3c. 40,533 ○ Yes ● No
   - 3d. 45,330 ● Yes ○ No

4. North High School has 5,000 students. South High School has $\frac{1}{10}$ as many students as North High School. How many students are there at South High School? 1 point
   500 students

5. Choose all the comparisons that are true. 1 point
   - ☐ 3.062 > 3.26
   - ☑ 2.36 > 2.306
   - ☐ 6.23 < 6.203
   - ☑ 6.203 < 6.32
   - ☐ 3.62 < 3.206

6. Laura shaded 60 squares on her hundredths grid. Billy shaded 50 squares on his hundredths grid.

   Part A
   Write two decimals less than Laura's decimal and greater than Billy's decimal. 1 point
   Sample answers: 0.54, 0.55

   Part B
   Write two decimals equivalent to Laura's decimal. 1 point
   Sample answers: 0.60, 0.600

7. Determine the pattern. Then write the decimals to complete the decimal grid. 2 points

0.35	0.37	
0.46	0.47	0.48
	0.57	
0.66		0.68

Assessment

8. Maria walked 4.035 kilometers. What is 4.035 written in expanded form? 1 point
   - Ⓐ $4 \times 1 + 3 \times \frac{1}{10} + 5 \times \frac{1}{100}$
   - Ⓑ $4 \times 1 + 3 \times \frac{1}{100} + 5 \times \frac{1}{1{,}000}$
   - Ⓒ $4 \times 1 + 3 \times \frac{1}{10} + 5 \times \frac{1}{1{,}000}$
   - Ⓓ $4 \times 10 + 3 \times \frac{1}{10} - 5 \times \frac{1}{100}$

9. Eddy's plum weighs 3.042 ounces. Desta's plum weighs 3.24 ounces. Whose plum weighs more? How can you tell? 1 point
   Desta's plum weighs more. Sample explanation: Both numbers have 3 in the ones place, but two tenths is greater than 0 tenths.

10. During the hockey season, Elena averaged 5.625 assists per game. What is 5.625 written in expanded form? How is it written with number names? 2 points
    $5 + 6 \times \frac{1}{10} + 2 \times \frac{1}{100} + 5 \times \frac{1}{1{,}000}$; five and six hundred twenty-five thousandths

11. The numbers below follow a pattern.
    300 30 3 0.3 ____ ____

    Part A
    What are the next two numbers in the pattern? 1 point
    0.03; 0.003

    Part B
    What is the relationship between the terms in the pattern? 1 point
    Sample answer: Each term is $\frac{1}{10}$ the value of the term on its left.

12. Kent completed his homework in 52.752 minutes. What is this number rounded to the nearest tenth? Explain how you decided. 2 points
    52.8; Sample explanation: Since the digit in the hundredths place is equal to 5, you increase the digit in the tenths place by 1. Then you drop the digits to the right of the tenths place.

Assessment

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	All correct choices selected.
2	1	Correct choice selected.
3	1	All correct choices selected.
4	1	Answer is correct.
5	1	All correct choices selected.
6	2	Correct answers to Part A and Part B
	1	Correct answer to Part A or Part B
7	2	All answers correct
	1	All but 1 or 2 answers correct
8	1	Correct choice selected.
9	1	Answer and explanation are correct.
10	2	Both answers correct
	1	Only 1 correct answer
11	2	Correct answers to Part A and Part B
	1	Correct answer to Part A or Part B

RtI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1	5.NBT.A.2	2	F17
2	5.NBT.A.3a	2	H26
3	5.NBT.A.1	2	F9
4	5.NBT.A.1	1	F9
5	5.NBT.A.3b	2	H31
6A	5.NBT.A.3a	1	H30
6B	5.NBT.A.3	1	H30
7	5.NBT.A.3a, 5.NBT.A.3b	3	H26
8	5.NBT.A.3a	2	H26
9	5.NBT.A.3b, MP.7	2	H31
10	5.NBT.A.3a	2	H26
11A	5.NBT.A.1	1	H31
11B	5.NBT.A.1	2	H31
12	5.NBT.A.4	3	H29

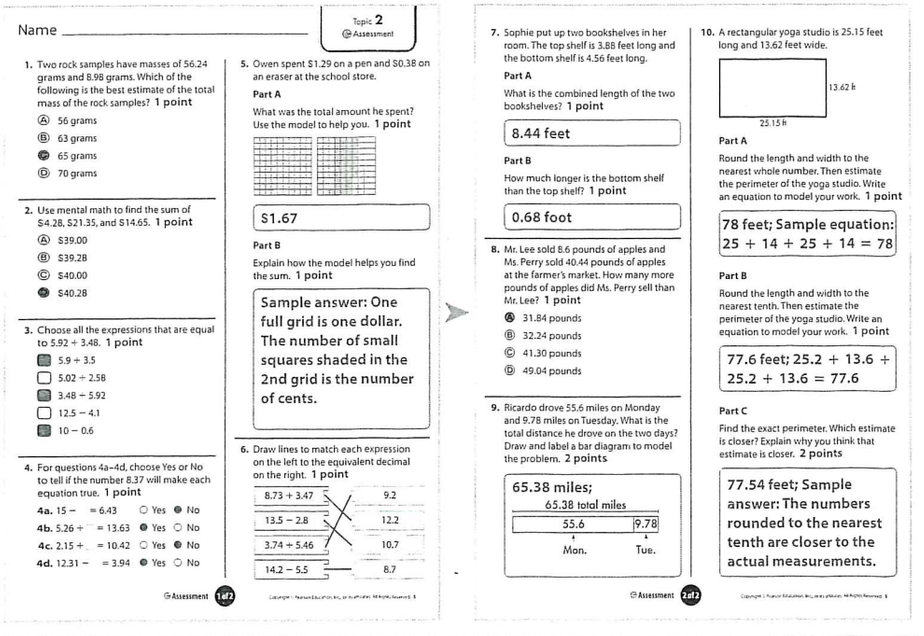
The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT
An auto-scored Topic Assessment is provided at PearsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com
Assessment

Topic Assessment Masters



Name _____ Topic 2 Assessment

1. Two rock samples have masses of 56.24 grams and 8.98 grams. Which of the following is the best estimate of the total mass of the rock samples? **1 point**
   - (A) 56 grams
   - (B) 63 grams
   - (C) 65 grams
   - (D) 70 grams

2. Use mental math to find the sum of $4.28, $21.35, and $14.65. **1 point**
   - (A) $39.00
   - (B) $39.28
   - (C) $40.00
   - (D) $40.28

3. Choose all the expressions that are equal to 5.92 + 3.48. **1 point**
   - [x] 5.9 + 3.5
   - [ ] 5.02 + 2.58
   - [x] 3.48 + 5.92
   - [ ] 12.5 − 4.1
   - [x] 10 − 0.6

4. For questions 4a–4d, choose Yes or No to tell if the number 8.37 will make each equation true. **1 point**
   - 4a. 15 − ___ = 6.43 ○ Yes ● No
   - 4b. 5.26 + ___ = 13.63 ● Yes ○ No
   - 4c. 2.15 + ___ = 10.42 ○ Yes ● No
   - 4d. 12.31 − ___ = 3.94 ● Yes ○ No

5. Owen spent $1.29 on a pen and $0.38 on an eraser at the school store.

   Part A
   What was the total amount he spent? Use the model to help you. **1 point**

   $1.67

   Part B
   Explain how the model helps you find the sum. **1 point**

   Sample answer: One full grid is one dollar. The number of small squares shaded in the 2nd grid is the number of cents.

6. Draw lines to match each expression on the left to the equivalent decimal on the right. **1 point**

8.73 + 3.47	9.2
13.5 − 2.8	12.2
3.74 + 5.46	10.7
14.2 − 5.5	8.7

Assessment 1 of 2

7. Sophie put up two bookshelves in her room. The top shelf is 3.88 feet long and the bottom shelf is 4.56 feet long.

   Part A
   What is the combined length of the two bookshelves? **1 point**

   8.44 feet

   Part B
   How much longer is the bottom shelf than the top shelf? **1 point**

   0.68 foot

8. Mr. Lee sold 8.6 pounds of apples and Ms. Perry sold 40.44 pounds of apples at the farmer's market. How many more pounds of apples did Ms. Perry sell than Mr. Lee? **1 point**
   - (A) 31.84 pounds
   - (B) 32.24 pounds
   - (C) 41.30 pounds
   - (D) 49.04 pounds

9. Ricardo drove 55.6 miles on Monday and 9.78 miles on Tuesday. What is the total distance he drove on the two days? Draw and label a bar diagram to model the problem. **2 points**

   65.38 miles;
   65.38 total miles
   55.6 (Mon.) | 9.78 (Tue.)

10. A rectangular yoga studio is 25.15 feet long and 13.62 feet wide.

    13.62 ft
    25.15 ft

    Part A
    Round the length and width to the nearest whole number. Then estimate the perimeter of the yoga studio. Write an equation to model your work. **1 point**

    78 feet; Sample equation: 25 + 14 + 25 + 14 = 78

    Part B
    Round the length and width to the nearest tenth. Then estimate the perimeter of the yoga studio. Write an equation to model your work. **1 point**

    77.6 feet; 25.2 + 13.6 + 25.2 + 13.6 = 77.6

    Part C
    Find the exact perimeter. Which estimate is closer? Explain why you think that estimate is closer. **2 points**

    77.54 feet; Sample answer: The numbers rounded to the nearest tenth are closer to the actual measurements.

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected.
2	1	Correct choice selected.
3	1	All correct choices selected.
4	1	All correct choices selected.
5A	1	Correct answer
5B	1	Correct explanation
6	1	All matches correct
7A	1	Correct answer
7B	1	Correct answer
8	1	Correct choice selected.
9	2	A correct answer and a correct bar diagram
	1	A correct answer or a correctly drawn bar diagram
10A	1	Correct answer
10B	1	Correct answer

RtI Item Analysis for Diagnosis and Intervention

Item	© Standard	DOK	MDIS
1	5.NBT.A.4, 5.NBT.B.7	1	H55
2	5.NBT.B.7	1	H56
3	5.NBT.B.7	1	H56, H57
4	5.NBT.B.7	1	H56, H57
5A	5.NBT.B.7	1	H54, H56
5B	5.NBT.B.7	1	H54
6	5.NBT.B.7	2	H56, H57
7A	5.NBT.B.7	1	H56
7B	5.NBT.B.7	1	H57
8	5.NBT.B.7	1	H57
9	5.NBT.B.7, MP.4	2	H55, H56
10A	5.NBT.A.4, 5.NBT.B.7	2	H28, H55
10B	5.NBT.A.4, 5.NBT.B.7	2	H28, H55
10C	5.NBT.B.7	3	H30, H56

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT

An auto-scored Topic Assessment is provided at PearsonRealize.com.

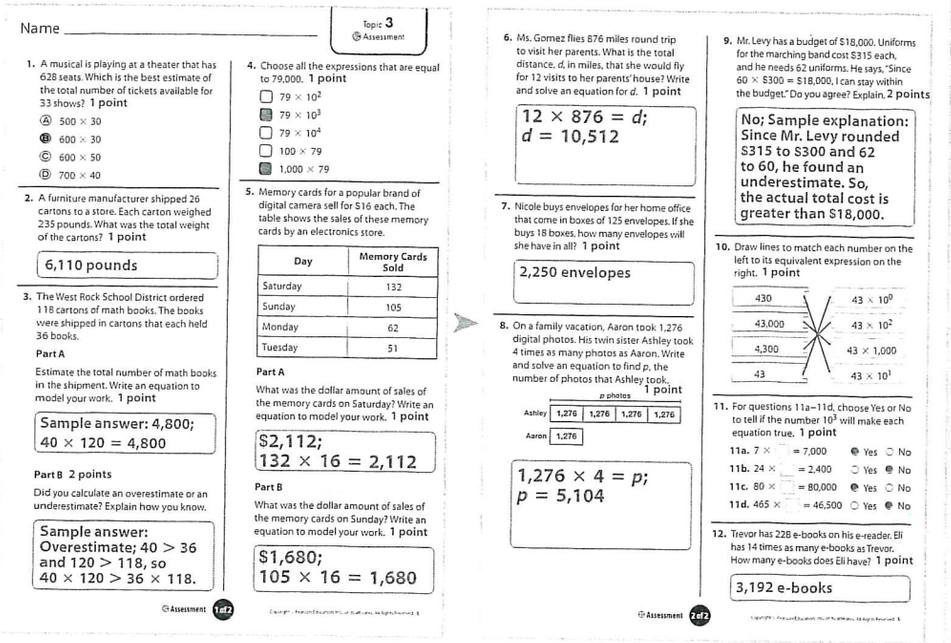
EXAMVIEW® TEST GENERATOR

ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com

Assessment

Topic Assessment Masters



Name _____ Topic 3 Assessment

1. A musical is playing at a theater that has 628 seats. Which is the best estimate of the total number of tickets available for 33 shows? **1 point**
   - Ⓐ 500 × 30
   - Ⓑ 600 × 30
   - Ⓒ 600 × 50
   - Ⓓ 700 × 40

2. A furniture manufacturer shipped 26 cartons to a store. Each carton weighed 235 pounds. What was the total weight of the cartons? **1 point**

   6,110 pounds

3. The West Rock School District ordered 118 cartons of math books. The books were shipped in cartons that each held 36 books.

   Part A

   Estimate the total number of math books in the shipment. Write an equation to model your work. **1 point**

   Sample answer: 4,800; 40 × 120 = 4,800

   Part B **2 points**

   Did you calculate an overestimate or an underestimate? Explain how you know.

   Sample answer: Overestimate; 40 > 36 and 120 > 118, so 40 × 120 > 36 × 118.

4. Choose all the expressions that are equal to 79,000. **1 point**
   - ☐ 79 × 10^2
   - ☑ 79 × 10^3
   - ☐ 79 × 10^4
   - ☐ 100 × 79
   - ☑ 1,000 × 79

5. Memory cards for a popular brand of digital camera sell for $16 each. The table shows the sales of these memory cards by an electronics store.

Day	Memory Cards Sold
Saturday	132
Sunday	105
Monday	62
Tuesday	51

   Part A

   What was the dollar amount of sales of the memory cards on Saturday? Write an equation to model your work. **1 point**

   $2,112; 132 × 16 = 2,112

   Part B

   What was the dollar amount of sales of the memory cards on Sunday? Write an equation to model your work. **1 point**

   $1,680; 105 × 16 = 1,680

Assessment 1 of 2

6. Ms. Gomez flies 876 miles round trip to visit her parents. What is the total distance, d, in miles, that she would fly for 12 visits to her parents' house? Write and solve an equation for d. **1 point**

   12 × 876 = d; d = 10,512

7. Nicole buys envelopes for her home office that come in boxes of 125 envelopes. If she buys 18 boxes, how many envelopes will she have in all? **1 point**

   2,250 envelopes

8. On a family vacation, Aaron took 1,276 digital photos. His twin sister Ashley took 4 times as many photos as Aaron. Write and solve an equation to find p, the number of photos that Ashley took. **1 point**

	p photos			
Ashley	1,276	1,276	1,276	1,276
Aaron	1,276			

   1,276 × 4 = p; p = 5,104

9. Mr. Levy has a budget of $18,000. Uniforms for the marching band cost $315 each, and he needs 62 uniforms. He says, "Since 60 × $300 = $18,000, I can stay within the budget." Do you agree? Explain. **2 points**

   No; Sample explanation: Since Mr. Levy rounded $315 to $300 and 62 to 60, he found an underestimate. So, the actual total cost is greater than $18,000.

10. Draw lines to match each number on the left to its equivalent expression on the right. **1 point**

430	43 × 10^0
43,000	43 × 10^2
4,300	43 × 1,000
43	43 × 10^1

11. For questions 11a–11d, choose Yes or No to tell if the number 10^3 will make each equation true. **1 point**

11a. 7 × ☐ = 7,000	● Yes	○ No
11b. 24 × ☐ = 2,400	○ Yes	● No
11c. 80 × ☐ = 80,000	● Yes	○ No
11d. 465 × ☐ = 46,500	○ Yes	● No

12. Trevor has 228 e-books on his e-reader. Eli has 14 times as many e-books as Trevor. How many e-books does Eli have? **1 point**

    3,192 e-books

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected.
2	1	Correct answer
3A	1	Correct answer and equation
3B	2	Thorough explanation supports the answer.
	1	The explanation has a minor error.
4	1	All correct choices selected.
5A	1	Correct answer and equation
5B	1	Correct answer and equation
6	1	Correct answer and equation
7	1	Correct answer
8	1	Correct equation and answer
9	2	A correct answer and explanation
	1	The explanation has a minor error.
10	1	All matches correct

RtI Item Analysis for Diagnosis and Intervention

Item	© Standard	DOK	MDIS
1	5.NBT.B.5	1	G65
2	5.NBT.B.5	1	G69
3A	5.NBT.B.5	1	G65
3B	5.NBT.B.5	2	G65
4	5.NBT.A.2	1	F17
5A	5.NBT.B.5	1	G69
5B	5.NBT.B.5	1	G69
6	5.NBT.B.5	1	G69
7	5.NBT.B.5	1	G69
8	5.NBT.B.5	1	G69
9	5.NBT.B.5, MP.3	3	G65
10	5.NBT.A.2	1	F17
11	5.NBT.A.2	1	F17
12	5.NBT.B.5	1	G69

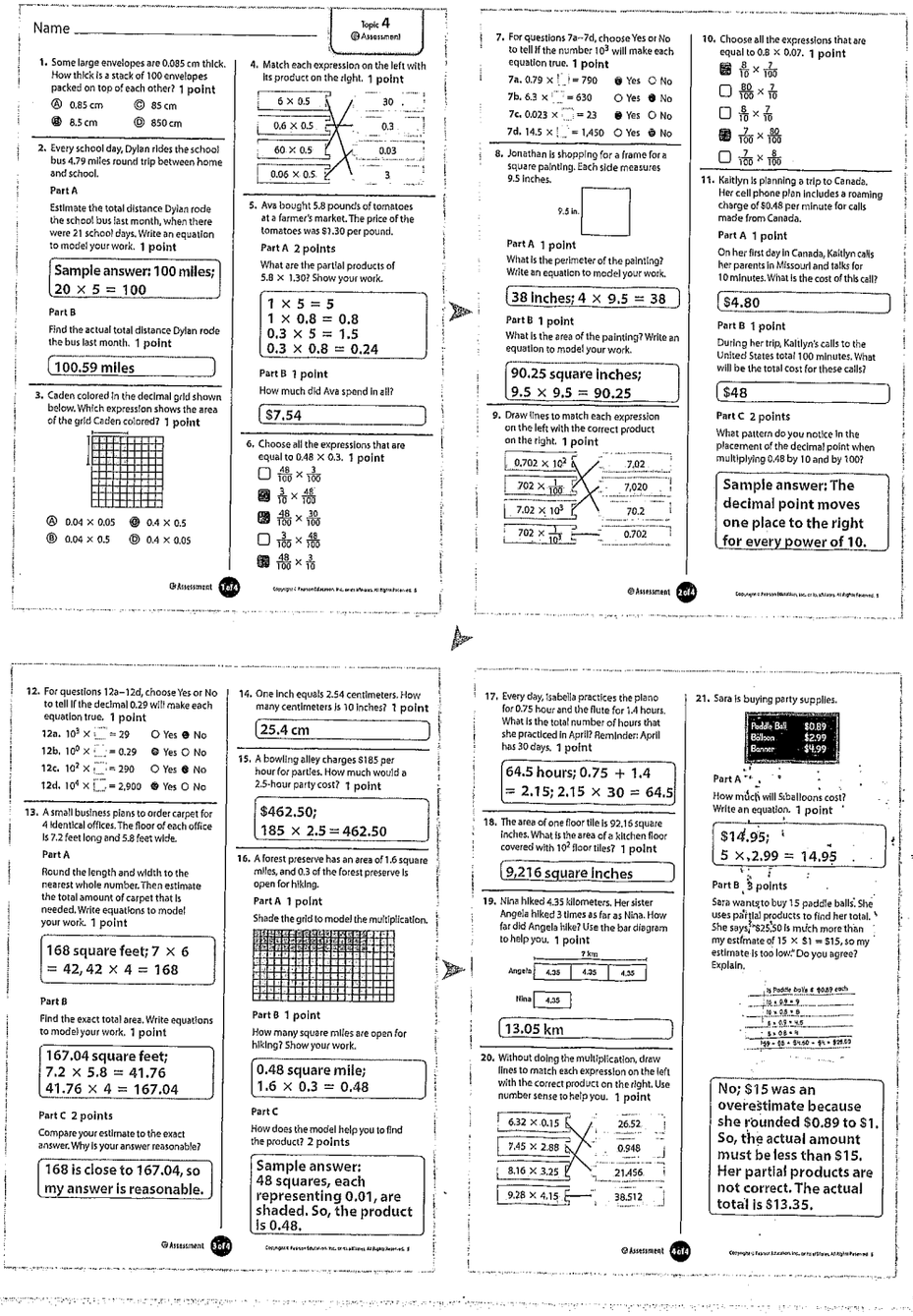
The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

TOPIC 4

TOPIC ASSESSMENT

USE MODELS AND STRATEGIES TO MULTIPLY DECIMALS

Topic Assessment Masters



Name _____ Topic 4 Assessment

1. Some large envelopes are 0.085 cm thick. How thick is a stack of 100 envelopes packed on top of each other? 1 point
   (A) 0.85 cm (C) 85 cm (B) 8.5 cm (D) 850 cm

2. Every school day, Dylan rides the school bus 4.79 miles round trip between home and school.
   Part A
   Estimate the total distance Dylan rode the school bus last month, when there were 21 school days. Write an equation to model your work. 1 point
   Sample answer: 100 miles; 20 × 5 = 100
   Part B
   Find the actual total distance Dylan rode the bus last month. 1 point
   100.59 miles

3. Caden colored in the decimal grid shown below. Which expression shows the area of the grid Caden colored? 1 point
   (A) 0.04 × 0.05 (C) 0.4 × 0.5 (B) 0.04 × 0.5 (D) 0.4 × 0.05

4. Match each expression on the left with its product on the right. 1 point
   6 × 0.5 — 30
   0.6 × 0.5 — 0.3
   60 × 0.5 — 0.03
   0.06 × 0.5 — 3

5. Ava bought 5.8 pounds of tomatoes at a farmer's market. The price of the tomatoes was $1.30 per pound.
   Part A 2 points
   What are the partial products of 5.8 × 1.30? Show your work.
   1 × 5 = 5
   1 × 0.8 = 0.8
   0.3 × 5 = 1.5
   0.3 × 0.8 = 0.24
   Part B 1 point
   How much did Ava spend in all?
   $7.54

6. Choose all the expressions that are equal to 0.48 × 0.3. 1 point
   ☐ $\frac{48}{100} \times \frac{3}{100}$
   ☒ $\frac{3}{10} \times \frac{48}{100}$
   ☒ $\frac{48}{100} \times \frac{30}{100}$
   ☐ $\frac{3}{100} \times \frac{48}{100}$
   ☒ $\frac{48}{100} \times \frac{3}{10}$

Assessment 1 of 4

7. For questions 7a–7d, choose Yes or No to tell if the number 10^3 will make each equation true. 1 point
   7a. 0.79 × ☐ = 790 ● Yes ○ No
   7b. 6.3 × ☐ = 630 ○ Yes ● No
   7c. 0.023 × ☐ = 23 ● Yes ○ No
   7d. 14.5 × ☐ = 1,450 ○ Yes ● No

8. Jonathan is shopping for a frame for a square painting. Each side measures 9.5 inches.
   9.5 in.
   Part A 1 point
   What is the perimeter of the painting? Write an equation to model your work.
   38 inches; 4 × 9.5 = 38
   Part B 1 point
   What is the area of the painting? Write an equation to model your work.
   90.25 square inches; 9.5 × 9.5 = 90.25

9. Draw lines to match each expression on the left with the correct product on the right. 1 point
   0.702 × 10^3 — 7.02
   702 × $\frac{1}{100}$ — 7.020
   7.02 × 10^3 — 70.2
   702 × $\frac{1}{10^3}$ — 0.702

10. Choose all the expressions that are equal to 0.8 × 0.07. 1 point
    ☒ $\frac{8}{10} \times \frac{7}{100}$
    ☐ $\frac{80}{100} \times \frac{7}{10}$
    ☐ $\frac{8}{10} \times \frac{7}{10}$
    ☒ $\frac{7}{100} \times \frac{80}{100}$
    ☐ $\frac{7}{100} \times \frac{8}{100}$

11. Kaitlyn is planning a trip to Canada. Her cell phone plan includes a roaming charge of $0.48 per minute for calls made from Canada.
    Part A 1 point
    On her first day in Canada, Kaitlyn calls her parents in Missouri and talks for 10 minutes. What is the cost of this call?
    $4.80
    Part B 1 point
    During her trip, Kaitlyn's calls to the United States total 100 minutes. What will be the total cost for these calls?
    $48
    Part C 2 points
    What pattern do you notice in the placement of the decimal point when multiplying 0.48 by 10 and by 100?
    Sample answer: The decimal point moves one place to the right for every power of 10.

Assessment 2 of 4

12. For questions 12a–12d, choose Yes or No to tell if the decimal 0.29 will make each equation true. 1 point
    12a. $10^3 \times$ ☐ = 29 ○ Yes ● No
    12b. $10^0 \times$ ☐ = 0.29 ● Yes ○ No
    12c. $10^2 \times$ ☐ = 290 ○ Yes ● No
    12d. $10^4 \times$ ☐ = 2,900 ● Yes ○ No

13. A small business plans to order carpet for 4 identical offices. The floor of each office is 7.2 feet long and 5.8 feet wide.
    Part A
    Round the length and width to the nearest whole number. Then estimate the total amount of carpet that is needed. Write equations to model your work. 1 point
    168 square feet; 7 × 6 = 42, 42 × 4 = 168
    Part B
    Find the exact total area. Write equations to model your work. 1 point
    167.04 square feet; 7.2 × 5.8 = 41.76, 41.76 × 4 = 167.04
    Part C 2 points
    Compare your estimate to the exact answer. Why is your answer reasonable?
    168 is close to 167.04, so my answer is reasonable.

14. One inch equals 2.54 centimeters. How many centimeters is 10 inches? 1 point
    25.4 cm

15. A bowling alley charges $185 per hour for parties. How much would a 2.5-hour party cost? 1 point
    $462.50; 185 × 2.5 = 462.50

16. A forest preserve has an area of 1.6 square miles, and 0.3 of the forest preserve is open for hiking.
    Part A 1 point
    Shade the grid to model the multiplication.
    Part B 1 point
    How many square miles are open for hiking? Show your work.
    0.48 square mile; 1.6 × 0.3 = 0.48
    Part C
    How does the model help you to find the product? 2 points
    Sample answer: 48 squares, each representing 0.01, are shaded. So, the product is 0.48.

Assessment 3 of 4

17. Every day, Isabella practices the piano for 0.75 hour and the flute for 1.4 hours. What is the total number of hours that she practiced in April? Reminder: April has 30 days. 1 point
    64.5 hours; 0.75 + 1.4 = 2.15; 2.15 × 30 = 64.5

18. The area of one floor tile is 92.16 square inches. What is the area of a kitchen floor covered with 10^2 floor tiles? 1 point
    9,216 square inches

19. Nina hiked 4.35 kilometers. Her sister Angela hiked 3 times as far as Nina. How far did Angela hike? Use the bar diagram to help you. 1 point
    ? km
    Angela: 4.35 | 4.35 | 4.35
    Nina: 4.35
    13.05 km

20. Without doing the multiplication, draw lines to match each expression on the left with the correct product on the right. Use number sense to help you. 1 point
    6.32 × 0.15 — 26.52
    7.45 × 2.88 — 0.948
    8.16 × 3.25 — 21.456
    9.28 × 4.15 — 38.512

21. Sara is buying party supplies.

Paddle Ball	$0.89
Balloon	$2.99
Banner	$4.99

    Part A
    How much will 5 balloons cost? Write an equation. 1 point
    $14.95; 5 × 2.99 = 14.95
    Part B 3 points
    Sara wants to buy 15 paddle balls. She uses partial products to find her total. She says, "$25.50 is much more than my estimate of 15 × $1 = $15, so my estimate is too low." Do you agree? Explain.
    No; $15 was an overestimate because she rounded $0.89 to $1. So, the actual amount must be less than $15. Her partial products are not correct. The actual total is $13.35.

Assessment 4 of 4

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

LINE TOPIC ASSESSMENT
auto-scored Topic Assessment is provided
earsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com

Assessment

me _____

TOPIC 4

© Assessment
Continued

1. For questions 12a-12d, choose Yes or No to tell if the decimal 0.65 will make each equation true. 1 point

12a. $10^2 \times \square = 65$ ● Yes ○ No
12b. $10^4 \times \square = 650$ ○ Yes ● No
12c. $10^1 \times \square = 6.5$ ● Yes ○ No
12d. $10^3 \times \square = 65$ ○ Yes ● No

13. Alyssa is painting 3 of the walls in her art studio blue. Each of the walls is 8.3 feet tall and 7.5 feet wide.

Part A

Round the length and width to the nearest whole number. Then estimate the area that Alyssa will paint. Write equations to model your work. 1 point

192 sq. ft; 8 × 8 = 64, 64 × 3 = 192.

Part B

Find the exact area. Write equations to model your work. 1 point

186.75 sq. ft; 8.3 × 7.5 = 62.25, 62.25 × 3 = 186.75

Part C 2 points

Compare your estimate to the exact answer. Why is your answer reasonable?

192 is close to 186.75, so my answer is reasonable.

14. Derrick runs 2.25 miles each day. How many total miles will he have run after 10 days? 1 point

22.5 miles

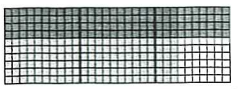
15. One glass of lemonade has 115 calories. How many calories are in 3.5 glasses of lemonade? Write an equation to model your work. 1 point

402.5 calories; 115 × 3.5 = 402.5

16. A farmer plants 0.4 of a field with wheat. The field is 2.3 acres.

Part A 1 point

Shade the grids to model the multiplication.



Part B 1 point

How many acres are planted with wheat? Write an equation to model your work.

0.92 acre; 2.3 × 0.4 = 0.92

Part C

How does the model help you find the product? 2 points

Sample answer: There are 92 small squares shaded in the overlapping part. Since each small square is one hundredth, the product is 0.92.

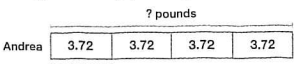
17. Bradley walks 0.65 mile each Friday to his friend's house. He takes a different route home that is 1.2 miles. How many miles will Bradley walk to his friend's house and back in a year? Show your work. Reminder: there are 52 weeks in a year. 1 point

96.2 miles; 0.65 + 1.2 = 1.85, 1.85 × 52 = 96.2

18. The area of one fabric square is 4.85 square inches. What is the area of a quilt made with 10^2 fabric squares? 1 point

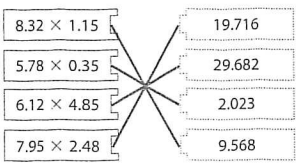
485 square inches

19. Jen bought 3.72 pounds of apples at a farmer's market. Andrea bought 4 times as much as Jen. How many pounds of apples did Andrea buy? Use the bar diagram to help you. 1 point



14.88 lb

20. Without doing the multiplication, draw lines to match each expression on the left with the correct product on the right. Use number sense to help you. 1 point



21. Leticia and Jamal go to a bakery.

Bagel	$0.95
Muffin	$1.99
Fruit Pie	$3.29

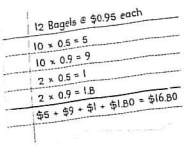
Part A

Jamal wants to buy 6 muffins. How much will this cost? Write an equation to model your work. 1 point

$11.94; 6 × 1.99 = 11.94

Part B

Leticia wants to buy 12 bagels. She uses partial products to find her total. She says "$16.80 is close to my estimate of 12 × $1 = $12, so this total is reasonable." Do you agree with her? Explain your reasoning. 3 points



Disagree. $12 was an overestimate because she rounded $0.95 to $1. So, $16.80 is not reasonable. Her partial products are not correct. The actual total is $11.40, which is closer to her estimate of $12.

RTI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS	Item	Standard	DOK	MDIS	Item	Standard	DOK	MDIS
1	5.NBT.A.2	1	F17	8	5.NBT.B.7	2	H60, H64	15	5.NBT.B.7	2	H60
2	5.NBT.B.7	2	H62	9	5.NBT.A.2	1	F17, H61	16	5.NBT.B.7	2	H63
3	5.NBT.B.7	2	H63	10	5.NBT.B.7	2	F17, H33	17	5.NBT.B.7	2	J2
4	5.NBT.B.7	1	H60, H64	11	5.NBT.A.2	2	F17	18	5.NBT.A.2	1	H61
5	5.NBT.B.7	1	H64	12	5.NBT.A.2	1	F17, H61	19	5.NBT.B.7	2	H60
6	5.NBT.B.7	2	H35	13	5.NBT.B.7, MP.4	3	H28, I45	20	5.NBT.B.7	2	H62
7	5.NBT.A.2	1	G61	14	5.NBT.A.2	1	H61	21	5.NBT.B.7	3	H62

TOPIC 5

TOPIC ASSESSMENT

USE MODELS AND STRATEGIES TO DIVIDE WHOLE NUMBERS

Topic Assessment Masters

Name _____ Topic 5 Assessment

1. For questions 1a–1d, choose Yes or No to tell if the number 50 will make each equation true. **1 point**

1a. 2,000 ÷ ☐ = 40 ● Yes ○ No
1b. 350 ÷ ☐ = 70 ○ Yes ● No
1c. 1,000 ÷ ☐ = 200 ○ Yes ● No
1d. 45,000 ÷ ☐ = 900 ● Yes ○ No

2. Which of the following is the best estimate of 756 ÷ 28? **1 point**

Ⓐ 30
Ⓑ 35
Ⓒ 40
Ⓓ 45

3. A factory makes 718 toy trains in one day. The toy trains are placed in boxes of 30.

Part A **1 point**

In what place will the first digit of the quotient be?

The tens place

Part B **1 point**

How many boxes will be filled?

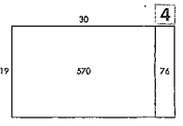
23

Part C **1 point**

How many toy trains will be left over?

28

4. A rectangular field has an area of 646 square feet. The width of the field is 19 feet. **2 points**



Write a number in the box to show the missing measurement.

What is the length of the field?

34 feet

5. Choose all of the expressions that are equal to 84,000 ÷ 40. **1 point**

☒ 8,400 ÷ 4
☒ 8,400 tens ÷ 4 tens
☐ 84 hundreds ÷ 4 hundreds
☐ 84 ÷ 4
☐ 84,000 tens ÷ 4 tens

6. A bakery will make 5,400 graham crackers. The graham crackers are packaged in boxes of 60. How many boxes of graham crackers will the bakery have? **1 point**

90 boxes

Assessment 1 of 4

7. Use the table.

Marco's Walking Goal: 475 Miles

Plan	Number of Miles Each Week	Number of Weeks Needed
A	10	48
B	20	24
C	30	16

Part A **1 point**

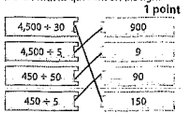
Using Plan C, how many weeks will it take Marco to reach his walking goal? Write the missing number in the table.

Part B **1 point**

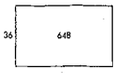
Show how you found your answer to Part A.

Sample answer:
30 × 15 = 450;
30 × 16 = 480;
480 > 475

8. Draw lines to match each expression on the left with its quotient on the right. **1 point**



9. A water tank is filled at a constant rate. After 36 minutes, there are 648 gallons of water in the tank. How many gallons of water flowed into the tank each minute? Use the model. **1 point**



18 gallons

10. Tonisha wants to find 23)589. In which place should she write the first digit of the quotient? **1 point**

Tens place

11. Ashton wants to find 6,278 ÷ 43.

Part A

In which place should Ashton place the first digit of the quotient? **1 point**

Hundreds place

Part B

Tell how you decided where to write the first digit of the quotient. **2 points**

Sample explanation:
43 × 100 = 4,300 and 43 × 1,000 = 43,000; Since 6,278 is between 4,300 and 43,000, the quotient is between 100 and 1,000.

Assessment 2 of 4

12. A candidate for mayor is calling 882 registered voters to remind them about the upcoming election. If the candidate has 49 volunteers and each person calls the same number of voters, how many voters will each volunteer call? **1 point**

Ⓐ 20 voters
Ⓑ 19 voters
Ⓒ 18 voters
Ⓓ 17 voters

13. A middle school needs buses to transport 579 students. If each bus carries 48 students, what is the fewest number of buses needed? **1 point**

Ⓐ 12 buses
Ⓑ 13 buses
Ⓒ 14 buses
Ⓓ 15 buses

14. A load of bricks weighs 7,798 ounces. Each brick weighs 67 ounces. Explain how you can use compatible numbers to estimate the number of bricks in the load. **2 points**

Sample answer: I can use 7,700 instead of 7,798 and 70 instead of 67. Then I can divide 7,700 ÷ 70 = 110. So a reasonable estimate is 110 bricks.

15. A theater holds 1,512 people. The 54 sections of the theater each have the same number of seats. Esther wants to find the number of seats in each section. Fill in the partial quotients that are missing from Esther's work below. **2 points**

8
20
54)1,512
−1,080
432
−432
0

16. A small business makes bottles of lemonade. Today, they have 528 ounces of lemonade to bottle. Each bottle holds 24 ounces of lemonade. They sell each bottle for $2.

Part A

Write two equations with variables that can be used to find how many dollars the business will receive by selling all of the bottles. **1 point**

Sample answer:
528 ÷ 24 = *b*;
b × 2 = *d*

Part B

How many dollars will the business receive? **1 point**

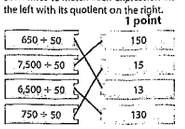
$44

Assessment 3 of 4

17. For questions 17a–17d, choose Yes or No to tell whether the number 70 will make each equation true. **1 point**

Ⓐ 350 ÷ ☐ = 50 ○ Yes ● No
Ⓑ 42,000 ÷ ☐ = 600 ● Yes ○ No
Ⓒ 490 ÷ ☐ = 7 ● Yes ○ No
Ⓓ 5,600 ÷ ☐ = 800 ○ Yes ● No

18. Draw lines to match each expression on the left with its quotient on the right. **1 point**



19. It will cost a total of $7,740 for 18 students to go to New York City for Spring Break. The cost for each student is the same. What is the cost for each student? **1 point**

$430

20. Tammy is finding 698 ÷ 57. In which place should she place the first digit of the quotient? **1 point**

Tens place

21. Which partial quotients could be added to find 777 ÷ 21? **1 point**

Ⓐ 30 and 3
Ⓑ 30 and 7
Ⓒ 40 and 3
Ⓓ 40 and 10

22. The table shows the number of golf balls produced by a factory each day for a week. The golf balls are shipped in boxes of 16.

Day	Golf Balls
Monday	215
Tuesday	153
Wednesday	349
Thursday	264
Friday	155

Part A

Write two equations with variables to find the number of boxes of golf balls that can be shipped at the end of the week. **1 point**

215 + 153 + 349 + 264 + 155 = *g*; *g* ÷ 16 = *b*

Part B

How many boxes of golf balls can be shipped? **1 point**

71 boxes

Assessment 4 of 4

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT
An auto-scored Topic Assessment is provided at PearsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com
Assessment

Name _____

TOPIC 5
Assessment Continued

12. The cost to rent a lodge for a family reunion is $975. If 65 people attend and pay the same price, how much does each person pay? 1 point

Ⓐ $16
Ⓑ $15
Ⓒ $14
Ⓓ $13

13. Shady Rivers summer camp has 188 campers this week. If there are 22 campers to each cabin, what is the fewest number of cabins needed? 1 point

Ⓐ 7 cabins
Ⓑ 8 cabins
Ⓒ 9 cabins
Ⓓ 10 cabins

14. The area of a rectangular banquet hall is 7,400 square feet. The length of one side of the hall is 82 feet. Explain how you can use compatible numbers to estimate the width of the hall. 2 points

Sample answer: I can use 7,200 instead of 7,400 and 80 instead of 82. Then I can find 7,200 ÷ 80 = 90. So a reasonable estimate is 90 ft.

15. The cost of renting a bus is $1,344. Tony wants to find how much each person will pay if 32 people ride the bus and share the cost equally. Fill in the partial quotients that are missing from Tony's work below. 2 points

```
      2
    4 0
32)1,344
  −1,280
      64
    − 64
       0
```

16. Jessie made 312 mini energy bars. She puts 24 bars in each bag. She plans to sell each bag for $6.

Part A

Write two equations with variables that Jessie can use to find the amount of money she will earn if she sells all of the bags. 1 point

Sample answer:
$312 \div 24 = n$;
$n \times 6 = t$

Part B

How much will she earn if she sells all of the bags? 1 point

$78

17. For questions 17a–d, choose Yes or No to tell if the number 40 will make each equation true. 1 point

17a. 280 ÷ ☐ = 7 — ● Yes ○ No
17b. 800 ÷ ☐ = 20 — ● Yes ○ No
17c. 4,000 ÷ ☐ = 10 — ○ Yes ● No
17d. 32,000 ÷ ☐ = 800 — ● Yes ○ No

18. Draw lines to match each expression on the left to its quotient on the right. 1 point

2,700 ÷ 30	9
270 ÷ 30	80
2,400 ÷ 30	90
240 ÷ 30	8

19. Charles burns 4,350 calories hiking 15 miles of the Appalachian Trail. He burns the same number of calories each mile. How many calories does he burn each mile? 1 point

290 calories

20. Mary needs to find 432 ÷ 48. In which place should she write the first digit of the quotient? 1 point

Ones place

21. Which partial quotients could be added to find 465 ÷ 15? 1 point

Ⓐ 20 and 1
Ⓑ 30 and 1
Ⓒ 30 and 9
Ⓓ 30 and 10

22. The table shows the number of students going on a field trip. One chaperone is needed for every 12 students.

DATA

Grade	Number of Students
Fifth Grade	310
Sixth Grade	305
Seventh Grade	225

Part A

Write two equations with variables that you can use to find the number of chaperones needed. 1 point

Sample answer:
$310 + 305 + 225 = t$;
$t \div 12 = c$

Part B

How many chaperones are needed? 1 point

70 chaperones

RtI Item Analysis for Diagnosis and Intervention

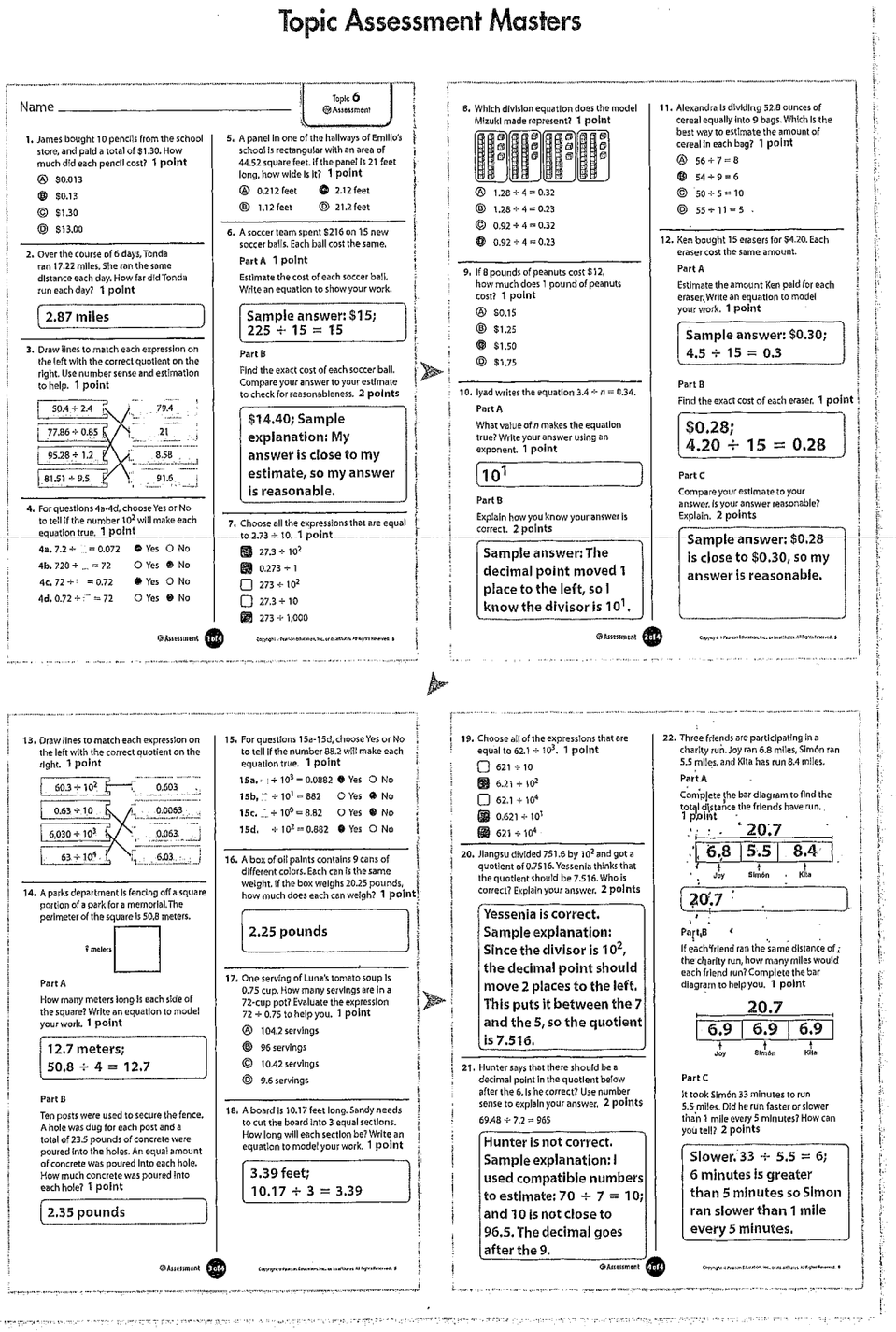
Item	Standard	DOK	MDIS	Item	Standard	DOK	MDIS	Item	Standard	DOK	MDIS
1	5.NBT.B.6	1	G71	8	5.NBT.B.6	1	G71	15	5.NBT.B.6	2	G74
2	5.NBT.B.6	2	G72	9	5.NBT.B.6	2	G73	16	5.NBT.B.6, MP.1	3	G73
3	5.NBT.B.6	2	G73	10	5.NBT.B.6	2	G72	17	5.NBT.B.6	1	G71
4	5.NBT.B.6	2	G73	11	5.NBT.B.6	3	G72	18	5.NBT.B.6	1	G71
5	5.NBT.B.6	1	G71	12	5.NBT.B.6	1	G73	19	5.NBT.B.6	1	G75
6	5.NBT.B.6	1	G71	13	5.NBT.B.6	2	G73	20	5.NBT.B.6	2	G72
7	5.NBT.B.6	3	G67	14	5.NBT.B.6	2	G72	21	5.NBT.B.6	2	G72
								22	5.NBT.B.6	3	G72

TOPIC 6

TOPIC ASSESSMENT

USE MODELS AND STRATEGIES TO DIVIDE DECIMALS

Topic Assessment Masters



Name _____ Topic 6 Assessment

1. James bought 10 pencils from the school store, and paid a total of $1.30. How much did each pencil cost? 1 point
   - (A) $0.013
   - (B) $0.13
   - (C) $1.30
   - (D) $13.00

2. Over the course of 6 days, Tonda ran 17.22 miles. She ran the same distance each day. How far did Tonda run each day? 1 point

   2.87 miles

3. Draw lines to match each expression on the left with the correct quotient on the right. Use number sense and estimation to help. 1 point

50.4 ÷ 2.4	79.4
77.86 ÷ 0.85	21
95.28 ÷ 1.2	8.58
81.51 ÷ 9.5	91.6

4. For questions 4a–4d, choose Yes or No to tell if the number 10^3 will make each equation true. 1 point

   4a. 7.2 ÷ ___ = 0.072 — (●) Yes ( ) No
   4b. 720 ÷ ___ = 72 — ( ) Yes (●) No
   4c. 72 ÷ ___ = 0.72 — (●) Yes ( ) No
   4d. 0.72 ÷ ___ = 72 — ( ) Yes (●) No

5. A panel in one of the hallways of Emilio's school is rectangular with an area of 44.52 square feet. If the panel is 21 feet long, how wide is it? 1 point
   - (A) 0.212 feet
   - (B) 1.12 feet
   - (C) 2.12 feet
   - (D) 21.2 feet

6. A soccer team spent $216 on 15 new soccer balls. Each ball cost the same.

   Part A 1 point

   Estimate the cost of each soccer ball. Write an equation to show your work.

   Sample answer: $15; 225 ÷ 15 = 15

   Part B

   Find the exact cost of each soccer ball. Compare your answer to your estimate to check for reasonableness. 2 points

   $14.40; Sample explanation: My answer is close to my estimate, so my answer is reasonable.

7. Choose all the expressions that are equal to 2.73 ÷ 10. 1 point
   - [x] 27.3 ÷ 10^2
   - [x] 0.273 ÷ 1
   - [ ] 273 ÷ 10^2
   - [ ] 27.3 ÷ 10
   - [x] 273 ÷ 1,000

Assessment 1 of 4

8. Which division equation does the model Mizuki made represent? 1 point

   - (A) 1.28 ÷ 4 = 0.32
   - (B) 1.28 ÷ 4 = 0.23
   - (C) 0.92 ÷ 4 = 0.32
   - (D) 0.92 ÷ 4 = 0.23

9. If 8 pounds of peanuts cost $12, how much does 1 pound of peanuts cost? 1 point
   - (A) $0.15
   - (B) $1.25
   - (C) $1.50
   - (D) $1.75

10. Iyad writes the equation 3.4 ÷ n = 0.34.

    Part A

    What value of n makes the equation true? Write your answer using an exponent. 1 point

    10^1

    Part B

    Explain how you know your answer is correct. 2 points

    Sample answer: The decimal point moved 1 place to the left, so I know the divisor is 10^1.

11. Alexandra is dividing 52.8 ounces of cereal equally into 9 bags. Which is the best way to estimate the amount of cereal in each bag? 1 point
    - (A) 56 ÷ 7 = 8
    - (B) 54 ÷ 9 = 6
    - (C) 50 ÷ 5 = 10
    - (D) 55 ÷ 11 = 5

12. Ken bought 15 erasers for $4.20. Each eraser cost the same amount.

    Part A

    Estimate the amount Ken paid for each eraser. Write an equation to model your work. 1 point

    Sample answer: $0.30; 4.5 ÷ 15 = 0.3

    Part B

    Find the exact cost of each eraser. 1 point

    $0.28; 4.20 ÷ 15 = 0.28

    Part C

    Compare your estimate to your answer. Is your answer reasonable? Explain. 2 points

    Sample answer: $0.28 is close to $0.30, so my answer is reasonable.

Assessment 2 of 4

13. Draw lines to match each expression on the left with the correct quotient on the right. 1 point

60.3 ÷ 10^2	0.603
0.63 ÷ 10	0.0063
6,030 ÷ 10^3	0.063
63 ÷ 10^4	6.03

14. A parks department is fencing off a square portion of a park for a memorial. The perimeter of the square is 50.8 meters.

    Part A

    How many meters long is each side of the square? Write an equation to model your work. 1 point

    12.7 meters; 50.8 ÷ 4 = 12.7

    Part B

    Ten posts were used to secure the fence. A hole was dug for each post and a total of 23.5 pounds of concrete were poured into the holes. An equal amount of concrete was poured into each hole. How much concrete was poured into each hole? 1 point

    2.35 pounds

15. For questions 15a–15d, choose Yes or No to tell if the number 88.2 will make each equation true. 1 point

    15a. ___ ÷ 10^3 = 0.0882 — (●) Yes ( ) No
    15b. ___ ÷ 10^1 = 882 — ( ) Yes (●) No
    15c. ___ ÷ 10^0 = 8.82 — ( ) Yes (●) No
    15d. ___ ÷ 10^2 = 0.882 — (●) Yes ( ) No

16. A box of oil paints contains 9 cans of different colors. Each can is the same weight. If the box weighs 20.25 pounds, how much does each can weigh? 1 point

    2.25 pounds

17. One serving of Luna's tomato soup is 0.75 cup. How many servings are in a 72-cup pot? Evaluate the expression 72 ÷ 0.75 to help you. 1 point
    - (A) 104.2 servings
    - (B) 96 servings
    - (C) 10.42 servings
    - (D) 9.6 servings

18. A board is 10.17 feet long. Sandy needs to cut the board into 3 equal sections. How long will each section be? Write an equation to model your work. 1 point

    3.39 feet; 10.17 ÷ 3 = 3.39

Assessment 3 of 4

19. Choose all of the expressions that are equal to 62.1 ÷ 10^3. 1 point
    - [ ] 621 ÷ 10
    - [x] 6.21 ÷ 10^2
    - [ ] 62.1 ÷ 10^4
    - [x] 0.621 ÷ 10^1
    - [x] 621 ÷ 10^4

20. Jiangsu divided 751.6 by 10^2 and got a quotient of 0.7516. Yessenia thinks that the quotient should be 7.516. Who is correct? Explain your answer. 2 points

    Yessenia is correct. Sample explanation: Since the divisor is 10^2, the decimal point should move 2 places to the left. This puts it between the 7 and the 5, so the quotient is 7.516.

21. Hunter says that there should be a decimal point in the quotient below after the 6. Is he correct? Use number sense to explain your answer. 2 points

    69.48 ÷ 7.2 = 965

    Hunter is not correct. Sample explanation: I used compatible numbers to estimate: 70 ÷ 7 = 10; and 10 is not close to 96.5. The decimal goes after the 9.

22. Three friends are participating in a charity run. Joy ran 6.8 miles, Simón ran 5.5 miles, and Kita has run 8.4 miles.

    Part A

    Complete the bar diagram to find the total distance the friends have run. 1 point

    20.7

    Part B

    If each friend ran the same distance of the charity run, how many miles would each friend run? Complete the bar diagram to help you. 1 point

    Part C

    It took Simón 33 minutes to run 5.5 miles. Did he run faster or slower than 1 mile every 5 minutes? How can you tell? 2 points

    Slower. 33 ÷ 5.5 = 6; 6 minutes is greater than 5 minutes so Simon ran slower than 1 mile every 5 minutes.

Assessment 4 of 4

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

E TOPIC ASSESSMENT
-scored Topic Assessment is provided
onRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

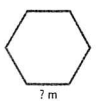
PEARSON realize.
PearsonRealize.com
Assessment

TOPIC 6
Assessment
Continued

/ lines to match each expression on
eft with the correct quotient on the
. 1 point

78 ÷ 10	0.708
8 ÷ 10^4	0.078
.8 ÷ 10^2	0.78
0 ÷ 10^3	0.0708

o is making a large mural. He
s a hexagon with a perimeter of
meters. Each side of the hexagon is
ame length.



a
many meters long is each side of
's hexagon? Write an equation to
l your work. 1 point

5 m; 10.5 ÷ 6 = 1.75

b
otal cost of the supplies to paint
ural is $38.70. Diego and 9 friends
the total cost equally. How much
ach person pay? 1 point

87

15. For questions 15a-15d, choose Yes or No to tell if the number 40.3 will make each equation true. 1 point

15a.	÷ 10^1 = 403	○ Yes	● No
15b.	÷ 10^2 = 0.403	● Yes	○ No
15c.	÷ 10^0 = 40.3	● Yes	○ No
15d.	÷ 10^3 = 4.03	○ Yes	● No

16. Lou's Diner spent $12.80 on 8 pounds of potatoes. What was the cost of one pound of potatoes? 1 point

$1.60

17. How many quarters are there in $30? Solve the equation 30 ÷ 0.25 to help you. 1 point

Ⓐ 12 quarters
Ⓑ 20 quarters
Ⓒ 120 quarters
Ⓓ 200 quarters

18. A group of 5 friends bought a bag of grapes to share equally. If the bag of grapes weighs 10.25 pounds, how much is each person's share? Write an equation to model your work. 1 point

2.05 lb; 10.25 ÷ 5 = 2.05

19. Choose all the expressions that are equal to 6.1 ÷ 10^2. 1 point

- [x] 61 ÷ 1,000
- [ ] 6.1 ÷ 10^5
- [x] 0.61 ÷ 10
- [ ] 6,100 ÷ 10^6
- [ ] 0.61 ÷ 10^3

20. Karen divided 560.9 by 10^3 and got a quotient of 0.5609. Julio thinks the quotient should be 5.609. Who is correct? Explain your answer. 2 points

Karen is correct. Sample explanation: Since the divisor is 10^3, the decimal point is moved 3 places to the left to find the quotient.

21. June says that there should be a decimal point in the quotient below after the 4. Is she correct? Use number sense to explain your answer. 2 points

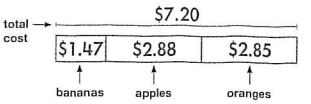
43.94 ÷ 5.2 = 845

June is not correct. Sample explanation: I used compatible numbers to estimate: 40 ÷ 5 = 8; and 84.5 is not close to 8. The decimal point belongs after the 8.

22. Three coworkers decided to buy fruit to share at lunchtime. Antonio spent $1.47 on bananas. Laura spent $2.88 on apples. Suzanne spent $2.85 on oranges.

Part A 1 point

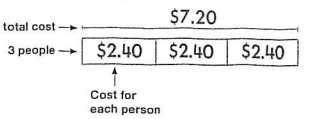
Complete the bar diagram to find out how much they spent in all on fruit.



$7.20

Part B

They evenly divided the cost of the 3 types of fruit. How much did each person pay? Complete the bar diagram to help you. 1 point



$2.40

Part C 2 points

If Laura bought 2.1 pounds of apples, is the price per pound of apples greater than or less than $1? How can you tell?

Greater than; Sample explanation: Since 2.88 is greater than 2.1, the quotient 2.88 ÷ 2.1 will be greater than 1.

RtI Item Analysis for Diagnosis and Intervention

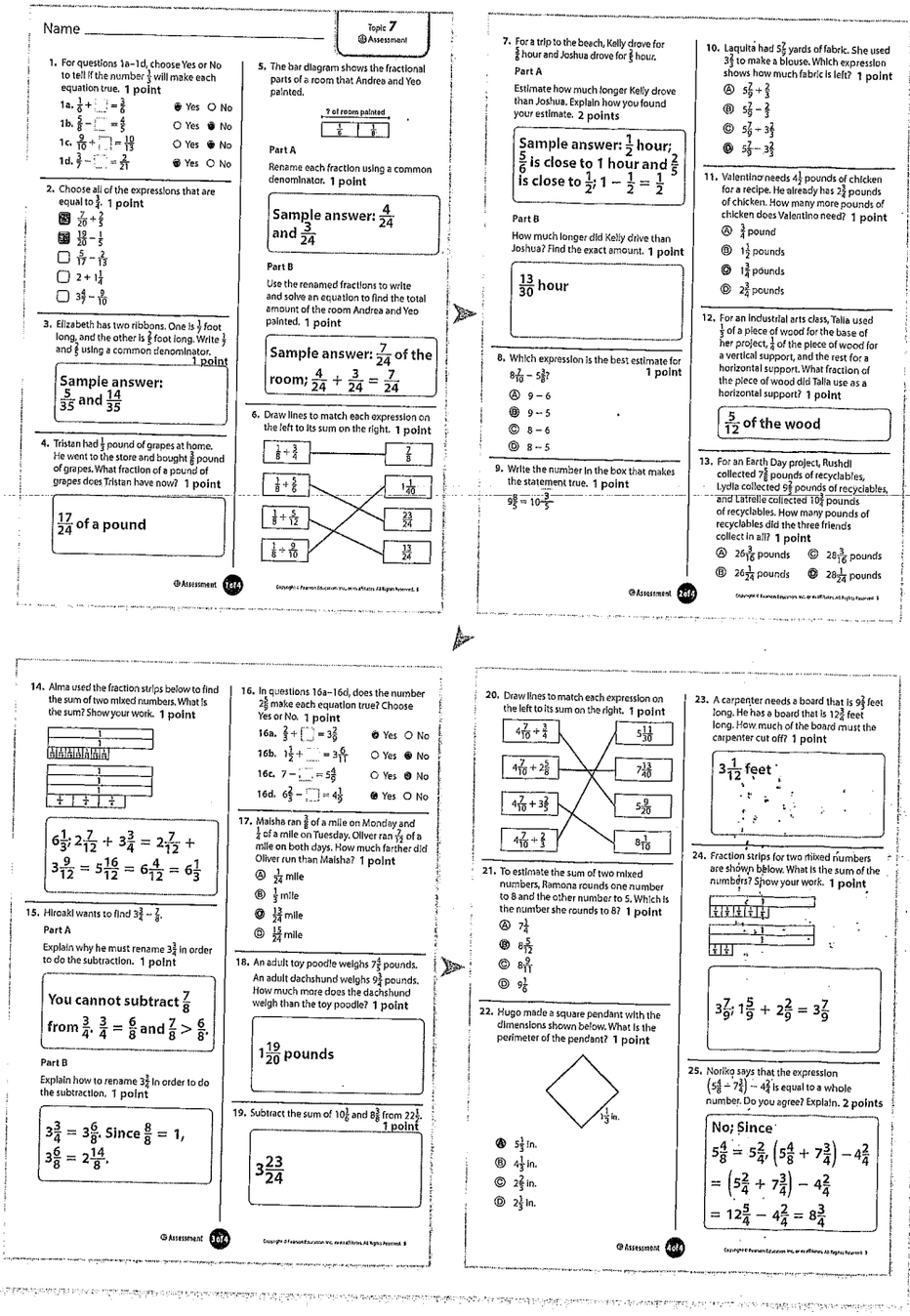
Standard	DOK	MDIS	Item	Standard	DOK	MDIS	Item	Standard	DOK	MDIS
5.NBT.A.2	1	H66	9	5.NBT.B.7	1	H65	17	5.NBT.B.7	2	H69
5.NBT.B.7	1	H65	10	5.NBT.A.2	3	H66	18	5.NBT.B.7	1	H65
5.NBT.B.7	2	H69	11	5.NBT.B.7	1	H68	19	5.NBT.A.2	1	H66
5.NBT.A.2	1	H66	12	5.NBT.B.7	3	H67, H68	20	5.NBT.A.2	2	H66
5.NBT.B.7	2	H67	13	5.NBT.A.2	1	H66	21	5.NBT.B.7	2	H69
5.NBT.B.7	3	H65, H68	14	5.NBT.B.7	2	H65, H66	22	5.NBT.B.7, MP.2	3	H67, H69
5.NBT.A.2	1	H66	15	5.NBT.A.2	1	H66				
5.NBT.B.7	1	H65	16	5.NBT.B.7	1	H65				

TOPIC 7

TOPIC ASSESSMENT

USE EQUIVALENT FRACTIONS TO ADD AND SUBTRACT FRACTIONS

Topic Assessment Masters



Name _____ Topic 7 Assessment

1. For questions 1a–1d, choose Yes or No to tell if the number $\frac{1}{3}$ will make each equation true. **1 point**
   - 1a. $\frac{1}{6} + \square = \frac{3}{6}$ — Yes / No
   - 1b. $\frac{5}{8} - \square = \frac{4}{5}$ — Yes / No
   - 1c. $\frac{9}{10} + \square = \frac{10}{13}$ — Yes / No
   - 1d. $\frac{3}{7} - \square = \frac{2}{21}$ — Yes / No
2. Choose all of the expressions that are equal to $\frac{3}{4}$. **1 point**
   - ☒ $\frac{7}{20} + \frac{2}{5}$
   - ☒ $\frac{12}{20} - \frac{1}{5}$
   - ☐ $\frac{5}{17} - \frac{2}{13}$
   - ☐ $2 + 1\frac{1}{4}$
   - ☐ $3\frac{9}{7} - \frac{9}{10}$
3. Elizabeth has two ribbons. One is $\frac{1}{7}$ foot long, and the other is $\frac{2}{5}$ foot long. Write $\frac{1}{7}$ and $\frac{2}{5}$ using a common denominator. **1 point**

   Sample answer: $\frac{5}{35}$ and $\frac{14}{35}$
4. Tristan had $\frac{1}{2}$ pound of grapes at home. He went to the store and bought $\frac{3}{8}$ pound of grapes. What fraction of a pound of grapes does Tristan have now? **1 point**

   $\frac{17}{24}$ of a pound
5. The bar diagram shows the fractional parts of a room that Andrea and Yeo painted.

   ? of room painted: $\frac{1}{6}$ | $\frac{1}{8}$

   Part A

   Rename each fraction using a common denominator. **1 point**

   Sample answer: $\frac{4}{24}$ and $\frac{3}{24}$

   Part B

   Use the renamed fractions to write and solve an equation to find the total amount of the room Andrea and Yeo painted. **1 point**

   Sample answer: $\frac{7}{24}$ of the room; $\frac{4}{24} + \frac{3}{24} = \frac{7}{24}$
6. Draw lines to match each expression on the left to its sum on the right. **1 point**
   - $\frac{1}{8} + \frac{3}{4}$ → $\frac{7}{8}$
   - $\frac{1}{8} + \frac{5}{6}$ → $\frac{1}{20}$
   - $\frac{1}{8} + \frac{5}{12}$ → $\frac{23}{24}$
   - $\frac{1}{8} \div \frac{9}{10}$ → $\frac{13}{24}$

Assessment 1of4

7. For a trip to the beach, Kelly drove for $\frac{5}{6}$ hour and Joshua drove for $\frac{2}{5}$ hour.

   Part A

   Estimate how much longer Kelly drove than Joshua. Explain how you found your estimate. **2 points**

   Sample answer: $\frac{1}{2}$ hour; $\frac{5}{6}$ is close to 1 hour and $\frac{2}{5}$ is close to $\frac{1}{2}$; $1 - \frac{1}{2} = \frac{1}{2}$

   Part B

   How much longer did Kelly drive than Joshua? Find the exact amount. **1 point**

   $\frac{13}{30}$ hour
8. Which expression is the best estimate for $8\frac{7}{10} - 5\frac{8}{9}$? **1 point**
   - Ⓐ 9 − 6
   - Ⓑ 9 − 5
   - Ⓒ 8 − 6
   - Ⓓ 8 − 5
9. Write the number in the box that makes the statement true. **1 point**

   $9\frac{3}{5} = 10 - \square$
10. Laquita had $5\frac{2}{3}$ yards of fabric. She used $3\frac{2}{3}$ to make a blouse. Which expression shows how much fabric is left? **1 point**
    - Ⓐ $5\frac{2}{3} + \frac{2}{3}$
    - Ⓑ $5\frac{2}{3} - \frac{2}{3}$
    - Ⓒ $5\frac{2}{3} - 3\frac{2}{3}$
    - Ⓓ $5\frac{2}{3} - 3\frac{2}{3}$
11. Valentino needs $4\frac{1}{2}$ pounds of chicken for a recipe. He already has $2\frac{3}{4}$ pounds of chicken. How many more pounds of chicken does Valentino need? **1 point**
    - Ⓐ $\frac{3}{4}$ pound
    - Ⓑ $1\frac{1}{2}$ pounds
    - Ⓒ $1\frac{3}{4}$ pounds
    - Ⓓ $2\frac{3}{4}$ pounds
12. For an industrial arts class, Talia used $\frac{1}{3}$ of a piece of wood for the base of her project, $\frac{1}{4}$ of the piece of wood for a vertical support, and the rest for a horizontal support. What fraction of the piece of wood did Talia use as a horizontal support? **1 point**

    $\frac{5}{12}$ of the wood
13. For an Earth Day project, Rushdi collected $7\frac{3}{8}$ pounds of recyclables, Lydia collected $6\frac{5}{8}$ pounds of recyclables, and Latrelle collected $10\frac{3}{4}$ pounds of recyclables. How many pounds of recyclables did the three friends collect in all? **1 point**
    - Ⓐ $26\frac{3}{16}$ pounds
    - Ⓑ $26\frac{1}{24}$ pounds
    - Ⓒ $28\frac{3}{16}$ pounds
    - Ⓓ $28\frac{1}{24}$ pounds

Assessment 2of4

14. Alma used the fraction strips below to find the sum of two mixed numbers. What is the sum? Show your work. **1 point**

    $6\frac{1}{3}$; $2\frac{7}{12} + 3\frac{3}{4} = 2\frac{7}{12} + 3\frac{9}{12} = 5\frac{16}{12} = 6\frac{4}{12} = 6\frac{1}{3}$
15. Hiroaki wants to find $3\frac{3}{4} - \frac{7}{8}$.

    Part A

    Explain why he must rename $3\frac{3}{4}$ in order to do the subtraction. **1 point**

    You cannot subtract $\frac{7}{8}$ from $\frac{3}{4}$. $\frac{3}{4} = \frac{6}{8}$ and $\frac{7}{8} > \frac{6}{8}$.

    Part B

    Explain how to rename $3\frac{3}{4}$ in order to do the subtraction. **1 point**

    $3\frac{3}{4} = 3\frac{6}{8}$. Since $\frac{8}{8} = 1$, $3\frac{6}{8} = 2\frac{14}{8}$.
16. In questions 16a–16d, does the number $2\frac{5}{8}$ make each equation true? Choose Yes or No. **1 point**
    - 16a. $\frac{2}{3} + \square = 3\frac{2}{9}$ — Yes / No
    - 16b. $1\frac{1}{2} + \square = 3\frac{6}{11}$ — Yes / No
    - 16c. $7 - \square = 5\frac{2}{9}$ — Yes / No
    - 16d. $6\frac{2}{3} - \square = 4\frac{1}{9}$ — Yes / No
17. Maisha ran $\frac{3}{8}$ of a mile on Monday and $\frac{1}{2}$ of a mile on Tuesday. Oliver ran $\frac{7}{12}$ of a mile on both days. How much farther did Oliver run than Maisha? **1 point**
    - Ⓐ $\frac{1}{24}$ mile
    - Ⓑ $\frac{1}{3}$ mile
    - Ⓒ $\frac{13}{24}$ mile
    - Ⓓ $\frac{15}{24}$ mile
18. An adult toy poodle weighs $7\frac{4}{5}$ pounds. An adult dachshund weighs $9\frac{1}{4}$ pounds. How much more does the dachshund weigh than the toy poodle? **1 point**

    $1\frac{19}{20}$ pounds
19. Subtract the sum of $10\frac{3}{8}$ and $8\frac{3}{8}$ from $22\frac{1}{3}$. **1 point**

    $3\frac{23}{24}$

Assessment 3of4

20. Draw lines to match each expression on the left to its sum on the right. **1 point**
    - $4\frac{7}{10} + \frac{3}{4}$ → $5\frac{11}{30}$
    - $4\frac{7}{10} + 2\frac{5}{8}$ → $7\frac{13}{40}$
    - $4\frac{7}{10} + 3\frac{2}{3}$ → $5\frac{9}{20}$
    - $4\frac{7}{10} + \frac{2}{3}$ → $8\frac{1}{10}$
21. To estimate the sum of two mixed numbers, Ramona rounds one number to 8 and the other number to 5. Which is the number she rounds to 8? **1 point**
    - Ⓐ $7\frac{1}{6}$
    - Ⓑ $8\frac{5}{12}$
    - Ⓒ $8\frac{9}{11}$
    - Ⓓ $9\frac{1}{6}$
22. Hugo made a square pendant with the dimensions shown below. What is the perimeter of the pendant? **1 point**

    - Ⓐ $5\frac{1}{3}$ in.
    - Ⓑ $4\frac{1}{3}$ in.
    - Ⓒ $2\frac{2}{3}$ in.
    - Ⓓ $2\frac{1}{3}$ in.
23. A carpenter needs a board that is $9\frac{3}{4}$ feet long. He has a board that is $12\frac{3}{4}$ feet long. How much of the board must the carpenter cut off? **1 point**

    $3\frac{1}{12}$ feet
24. Fraction strips for two mixed numbers are shown below. What is the sum of the numbers? Show your work. **1 point**

    $3\frac{7}{9}$; $1\frac{5}{9} + 2\frac{2}{9} = 3\frac{7}{9}$
25. Noriko says that the expression $\left(5\frac{4}{8} - 7\frac{3}{4}\right) - 4\frac{2}{4}$ is equal to a whole number. Do you agree? Explain. **2 points**

    No; Since
    $5\frac{4}{8} = 5\frac{2}{4}$, $\left(5\frac{4}{8} + 7\frac{3}{4}\right) - 4\frac{2}{4}$
    $= \left(5\frac{2}{4} + 7\frac{3}{4}\right) - 4\frac{2}{4}$
    $= 12\frac{5}{4} - 4\frac{2}{4} = 8\frac{3}{4}$

Assessment 4of4

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

TOPIC ASSESSMENT
ored Topic Assessment is provided
Realize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

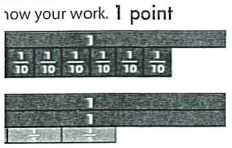
PEARSON realize.
PearsonRealize.com
Assessment

Grade 5 Teacher's Edition VOLUME 1 TOPICS 1–7

TOPIC 7

Assessment
Continued

d the model below to find the two mixed numbers. What is the ow your work. 1 point



$1\frac{8}{10} + 2\frac{3}{5} = 1\frac{4}{5} + 2\frac{3}{5} = 4\frac{2}{5}$

vants to find $4\frac{1}{5} - \frac{7}{10}$.

why he must rename $4\frac{1}{5}$ in order e subtraction. 1 point

cannot subtract $\frac{7}{10}$ from $= \frac{2}{10}$ and $\frac{7}{10} > \frac{2}{10}$.

how to rename $4\frac{1}{5}$ in order to do traction. 1 point

$4\frac{2}{10}$. Since $\frac{10}{10} = 1$, $= 3\frac{12}{10}$.

16. In questions 16a–16d, does the number $1\frac{3}{8}$ make each equation true? Choose Yes or No. 1 point

16a. $\frac{1}{4} + \square = 1\frac{7}{8}$ ○ Yes ● No
16b. $2\frac{3}{4} + \square = 4\frac{1}{8}$ ● Yes ○ No
16c. $4 - \square = 2\frac{5}{8}$ ● Yes ○ No
16d. $3\frac{1}{2} - \square = 2\frac{1}{4}$ ○ Yes ● No

17. Mica read $\frac{1}{6}$ of a book on Monday and $\frac{3}{8}$ on Tuesday. Susan read $\frac{5}{6}$ of the same book. How much more of the book has Susan read than Mica? 1 point

Ⓐ $\frac{14}{24}$
Ⓑ $\frac{8}{24}$
Ⓒ $\frac{7}{12}$
Ⓓ $\frac{7}{24}$

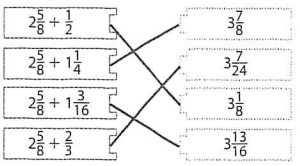
18. A pelican has a wingspan of $8\frac{1}{5}$ feet. An eagle has a wingspan of $6\frac{2}{3}$ feet. How much longer is the wingspan of a pelican? 1 point

$1\frac{8}{15}$ feet

19. Subtract the sum of $4\frac{3}{4}$ and $5\frac{2}{3}$ from $12\frac{1}{2}$. 1 point

$2\frac{1}{12}$

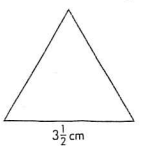
20. Draw lines to match each expression on the left to its sum on the right. 1 point



21. To estimate the sum of two mixed numbers, Carla rounds one number to 3 and the other number to 7. Which is the number she rounds to 3? 1 point

Ⓐ $2\frac{5}{8}$
Ⓑ $2\frac{11}{30}$
Ⓒ $3\frac{4}{6}$
Ⓓ $3\frac{7}{9}$

22. Mark is making a small frame in the shape of an equilateral triangle with the dimensions shown below. What is the perimeter of the frame? 1 point

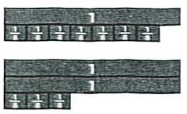


Ⓐ $6\frac{1}{2}$ cm
Ⓑ $9\frac{1}{2}$ cm
Ⓒ $9\frac{1}{6}$ cm
Ⓓ $10\frac{1}{2}$ cm

23. A baker uses food coloring to color cake batter. He needs $4\frac{1}{8}$ ounces of green food coloring. The baker only has $2\frac{1}{2}$ ounces. How much more green food coloring does he need? 1 point

$1\frac{5}{8}$ ounces

24. Models for two mixed numbers are shown below. What is the sum of the numbers? Show your work. 1 point



$4\frac{1}{4}$ or $4\frac{2}{8}$; $1\frac{7}{8} + 2\frac{3}{8} = 3\frac{10}{8} = 4\frac{2}{8} = 4\frac{1}{4}$

25. Dawson says that the expression $\left(2\frac{4}{10} + 8\frac{4}{5}\right) - 3\frac{1}{5}$ is equal to a whole number. Do you agree? Explain. 2 points

Yes; Since $2\frac{4}{10} = 2\frac{2}{5}$,
$\left(2\frac{4}{10} + 8\frac{4}{5}\right) - 3\frac{1}{5}$
$= \left(2\frac{2}{5} + 8\frac{4}{5}\right) - 3\frac{1}{5}$
$= 11\frac{1}{5} - 3\frac{1}{5} = 8$

Item Analysis for Diagnosis and Intervention

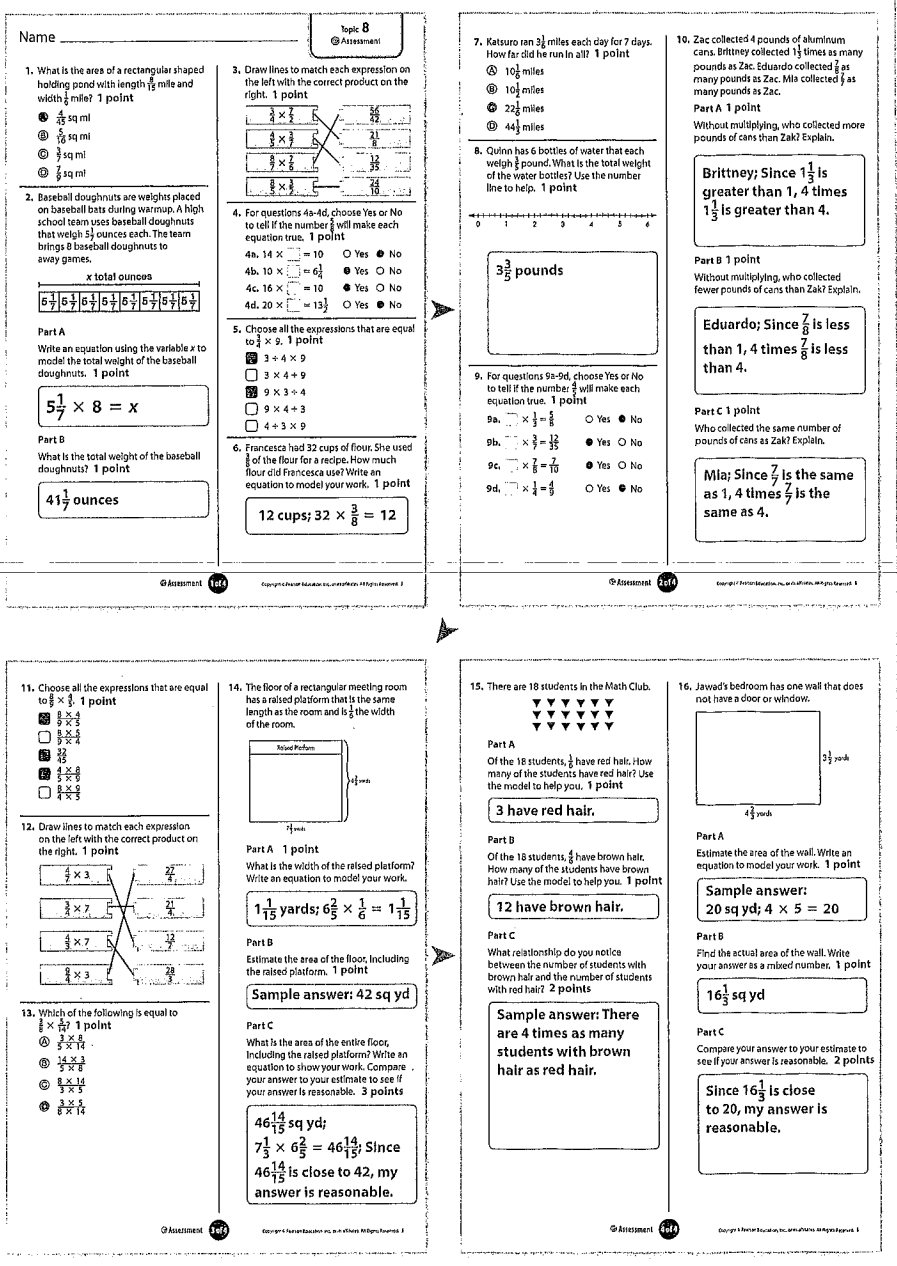
Standard	DOK	MDIS	Item	© Standard	DOK	MDIS	Item	© Standard	DOK	MDIS
5.NF.A.1	1	H42, H43	10	5.NF.A.1, 5.NF.A.2	1	H44	19	5.NF.A.1	1	H46
5.NF.A.1	1	H42, H43	11	5.NF.A.2	1	H42	20	5.NF.A.1	1	H45
5.NF.A.2	1	H16	12	5.NF.A.2	1	H42	21	5.NF.A.2	1	H44
5.NF.A.2	1	H42	13	5.NF.A.2	1	H45	22	5.NF.A.2	1	H45
5.NF.A.2	2	H16, H42	14	5.NF.A.1, MP.4	1	H45	23	5.NF.A.2	1	H46
5.NF.A.1	1	H42	15	5.NF.A.1	2	H46	24	5.NF.A.1	1	H45
5.NF.A.2	2	H42	16	5.NF.A.1	1	H45, H46	25	5.NF.A.1	2	H45, H46
5.NF.A.2	1	H44	17	5.NF.A.2	1	H46				
5.NF.A.1	1	H45	18	5.NF.A.2	1	H46				

PIC 8

TOPIC ASSESSMENT

APPLY UNDERSTANDING OF MULTIPLICATION TO MULTIPLY FRACTIONS

Topic Assessment Masters



Name _____ Topic 8 Assessment

1. What is the area of a rectangular shaped holding pond with length $\frac{8}{15}$ mile and width $\frac{1}{2}$ mile? 1 point
   - (A) $\frac{4}{15}$ sq mi
   - (B) $\frac{5}{16}$ sq mi
   - (C) $\frac{3}{7}$ sq mi
   - (D) $\frac{7}{8}$ sq mi

2. Baseball doughnuts are weights placed on baseball bats during warmup. A high school team uses baseball doughnuts that weigh $5\frac{1}{7}$ ounces each. The team brings 8 baseball doughnuts to away games.

   x total ounces

   $6\frac{1}{7}$ $5\frac{1}{7}$ $6\frac{1}{7}$ $5\frac{1}{7}$ $6\frac{1}{7}$ $5\frac{1}{7}$ $5\frac{1}{7}$ $6\frac{1}{7}$

   Part A

   Write an equation using the variable x to model the total weight of the baseball doughnuts. 1 point

   $5\frac{1}{7} \times 8 = x$

   Part B

   What is the total weight of the baseball doughnuts? 1 point

   $41\frac{1}{7}$ ounces

3. Draw lines to match each expression on the left with the correct product on the right. 1 point

   $\frac{4}{5} \times \frac{7}{2}$ — $\frac{28}{42}$

   $\frac{6}{7} \times \frac{3}{7}$ — $\frac{21}{8}$

   $\frac{8}{5} \times \frac{7}{6}$ — $\frac{12}{35}$

   $\frac{8}{3} \times \frac{3}{7}$ — $\frac{24}{10}$

4. For questions 4a–4d, choose Yes or No to tell if the number $\frac{2}{3}$ will make each equation true. 1 point

   4a. $14 \times \square = 10$ ○ Yes ● No

   4b. $10 \times \square = 6\frac{2}{3}$ ● Yes ○ No

   4c. $16 \times \square = 10$ ● Yes ○ No

   4d. $20 \times \square = 13\frac{1}{3}$ ○ Yes ● No

5. Choose all the expressions that are equal to $\frac{3}{4} \times 9$. 1 point
   - ☒ $3 \div 4 \times 9$
   - ☐ $3 \times 4 \div 9$
   - ☒ $9 \times 3 \div 4$
   - ☐ $9 \times 4 \div 3$
   - ☐ $4 \div 3 \times 9$

6. Francesca had 32 cups of flour. She used $\frac{3}{8}$ of the flour for a recipe. How much flour did Francesca use? Write an equation to model your work. 1 point

   12 cups; $32 \times \frac{3}{8} = 12$

Assessment 1of4

7. Katsuro ran $3\frac{1}{6}$ miles each day for 7 days. How far did he run in all? 1 point
   - (A) $10\frac{1}{6}$ miles
   - (B) $10\frac{1}{2}$ miles
   - (C) $22\frac{1}{6}$ miles
   - (D) $44\frac{1}{3}$ miles

8. Quinn has 6 bottles of water that each weigh $\frac{3}{5}$ pound. What is the total weight of the water bottles? Use the number line to help. 1 point

   0 1 2 3 4 5 6

   $3\frac{3}{5}$ pounds

9. For questions 9a–9d, choose Yes or No to tell if the number $\frac{2}{3}$ will make each equation true. 1 point

   9a. $\square \times \frac{1}{2} = \frac{5}{8}$ ○ Yes ● No

   9b. $\square \times \frac{3}{5} = \frac{12}{35}$ ● Yes ○ No

   9c. $\square \times \frac{2}{5} = \frac{7}{10}$ ● Yes ○ No

   9d. $\square \times \frac{1}{4} = \frac{4}{9}$ ○ Yes ● No

10. Zac collected 4 pounds of aluminum cans. Britney collected $1\frac{1}{3}$ times as many pounds as Zac. Eduardo collected $\frac{7}{8}$ as many pounds as Zac. Mia collected $\frac{7}{7}$ as many pounds as Zac.

    Part A 1 point

    Without multiplying, who collected more pounds of cans than Zak? Explain.

    Brittney; Since $1\frac{1}{3}$ is greater than 1, 4 times $1\frac{1}{3}$ is greater than 4.

    Part B 1 point

    Without multiplying, who collected fewer pounds of cans than Zak? Explain.

    Eduardo; Since $\frac{7}{8}$ is less than 1, 4 times $\frac{7}{8}$ is less than 4.

    Part C 1 point

    Who collected the same number of pounds of cans as Zak? Explain.

    Mia; Since $\frac{7}{7}$ is the same as 1, 4 times $\frac{7}{7}$ is the same as 4.

Assessment 2of4

11. Choose all the expressions that are equal to $\frac{8}{9} \times \frac{3}{5}$. 1 point
    - ☒ $\frac{8}{9} \times \frac{4}{5}$
    - ☐ $\frac{8}{9} \times \frac{5}{4}$
    - ☒ $\frac{32}{45}$
    - ☒ $\frac{4}{5} \times \frac{8}{9}$
    - ☐ $\frac{8}{4} \times \frac{9}{5}$

12. Draw lines to match each expression on the right. 1 point

    $\frac{4}{7} \times 3$ — $\frac{27}{4}$

    $\frac{3}{4} \times 7$ — $\frac{21}{4}$

    $\frac{4}{3} \times 7$ — $\frac{12}{7}$

    $\frac{9}{4} \times 3$ — $\frac{28}{3}$

13. Which of the following is equal to $\frac{8}{5} \times \frac{14}{3}$? 1 point
    - (A) $\frac{3 \times 8}{5 \times 14}$
    - (B) $\frac{14 \times 3}{5 \times 8}$
    - (C) $\frac{8 \times 14}{3 \times 5}$
    - (D) $\frac{3 \times 5}{8 \times 14}$

14. The floor of a rectangular meeting room has a raised platform that is the same length as the room and is $\frac{1}{6}$ the width of the room.

    Part A 1 point

    What is the width of the raised platform? Write an equation to model your work.

    $1\frac{1}{15}$ yards; $6\frac{2}{5} \times \frac{1}{6} = 1\frac{1}{15}$

    Part B

    Estimate the area of the floor, including the raised platform. 1 point

    Sample answer: 42 sq yd

    Part C

    What is the area of the entire floor, including the raised platform? Write an equation to show your work. Compare your answer to your estimate to see if your answer is reasonable. 3 points

    $46\frac{14}{15}$ sq yd; $7\frac{1}{3} \times 6\frac{2}{5} = 46\frac{14}{15}$; Since $46\frac{14}{15}$ is close to 42, my answer is reasonable.

Assessment 3of4

15. There are 18 students in the Math Club.

    Part A

    Of the 18 students, $\frac{1}{6}$ have red hair. How many of the students have red hair? Use the model to help you. 1 point

    3 have red hair.

    Part B

    Of the 18 students, $\frac{2}{3}$ have brown hair. How many of the students have brown hair? Use the model to help you. 1 point

    12 have brown hair.

    Part C

    What relationship do you notice between the number of students with brown hair and the number of students with red hair? 2 points

    Sample answer: There are 4 times as many students with brown hair as red hair.

16. Jawad's bedroom has one wall that does not have a door or window.

    Part A

    Estimate the area of the wall. Write an equation to model your work. 1 point

    Sample answer: 20 sq yd; $4 \times 5 = 20$

    Part B

    Find the actual area of the wall. Write your answer as a mixed number. 1 point

    $16\frac{1}{3}$ sq yd

    Part C

    Compare your answer to your estimate to see if your answer is reasonable. 2 points

    Since $16\frac{1}{3}$ is close to 20, my answer is reasonable.

Assessment 4of4

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT
An auto-scored Topic Assessment is provided at PearsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize. PearsonRealize.com

Assessment

Name _____

TOPIC 8

© Assessment Continued

11. Choose all the expressions that are equal to $\frac{7}{8} \times \frac{9}{10}$. 1 point

- [ ] $\frac{7 \times 10}{8 \times 9}$
- [x] $\frac{7 \times 9}{8 \times 10}$
- [ ] $\frac{7 \times 8}{9 \times 10}$
- [x] $\frac{63}{80}$
- [ ] $\frac{8 \times 9}{7 \times 10}$

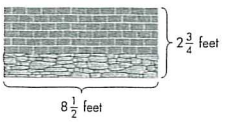
12. Draw lines to match each expression on the left with the correct product on the right. 1 point

$\frac{3}{8} \times 5$	$\frac{24}{5}$
$\frac{3}{5} \times 8$	$\frac{40}{3}$
$\frac{5}{3} \times 8$	$\frac{30}{8}$
$\frac{6}{8} \times 5$	$\frac{15}{8}$

13. Which of the following is equal to $\frac{4}{7} \times \frac{11}{15}$? 1 point

Ⓐ $\frac{4 \times 7}{11 \times 15}$
Ⓑ $\frac{4 \times 15}{7 \times 11}$
© $\frac{4 \times 11}{7 \times 15}$
Ⓓ $\frac{7 \times 15}{4 \times 11}$

14. Members of a landscaping company built a retaining wall. They used brick to make the top $\frac{2}{3}$ of the wall.



Part A

What is the height of the brick portion of the wall? Write an equation to model your work. 1 point

$1\frac{5}{6}$ feet; $2\frac{3}{4} \times \frac{2}{3} = 1\frac{5}{6}$

Part B

Estimate the area of the whole retaining wall. 1 point

Sample answer: 27 sq ft

Part C

What is the area of the whole retaining wall? Write an equation to show your work. Compare your answer to your estimate to see if your answer is reasonable. 3 points

$23\frac{3}{8}$ sq ft; $8\frac{1}{2} \times 2\frac{3}{4} = 23\frac{3}{8}$. Since $23\frac{3}{8}$ is close to 27, my answer is reasonable.

15. Tyler's family rented 15 DVDs last month.

Part A

Of the 15 DVDs, $\frac{1}{5}$ were documentaries. How many of the movies were documentaries? Use the model to help you. 1 point

3 were documentaries.

Part B

Of the 15 DVDs, $\frac{3}{5}$ were comedies. How many movies were comedies? Use the model to help you. 1 point

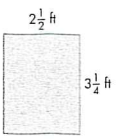
9 were comedies.

Part C

What relationship do you notice between the number of comedies and the number of documentaries? 2 points

Sample answer: There were 3 times as many comedies as documentaries.

16. Kristen and Niko buy a canvas for their art studio.



Part A

Estimate the area of their canvas. Write an equation to model your work. 1 point

Sample answer: 9 sq ft; $3 \times 3 = 9$

Part B

Find the actual area of their canvas. Write your answer as a mixed number. 1 point

$8\frac{1}{8}$ sq ft

Part C 2 points

Compare your answer to your estimate to see if your answer is reasonable.

Since $8\frac{1}{8}$ is close to 9, my answer is reasonable.

RtI

Item Analysis for Diagnosis and Intervention

m	© Standard	DOK	MDIS	Item	© Standard	DOK	MDIS
	5.NF.B.4b	1	H48	9	5.NF.B.4a	1	H48
2	5.NF.B.6	1	H52	10	5.NF.B.5a, 5.NF.B.5b	2	H47
3	5.NF.B.4a	1	H48	11	5.NF.B.4a	1	H48
4	5.NF.B.4a	1	H47	12	5.NF.B.4a	1	H47
5	5.NF.B.4a	1	H47	13	5.NF.B.4a	1	H48
6	5.NF.B.4a, 5.NF.B.6	1	H47	14	5.NF.B.4b, 5.NF.B.6	3	H52
7	5.NF.B.6	1	H52	15	5.NF.B.4a, 5.NF.B.6, MP.1	2	H47
8	5.NF.B.4a, 5.NF.B.6	1	H47	16	5.NF.B.4b	2	H52

ONLINE TOPIC ASSESSMENT

An auto-scored Topic Assessment is provided at PearsonRealize.com.

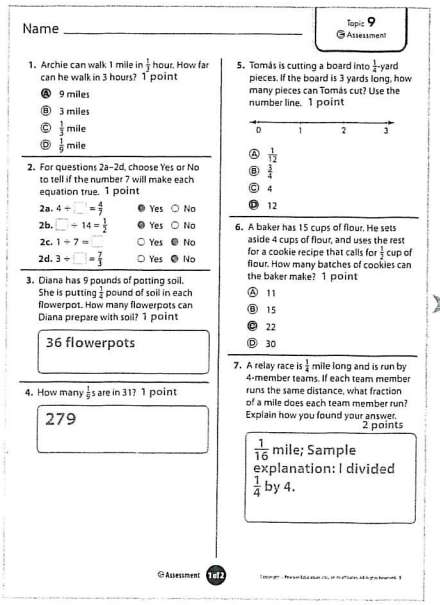
EXAMVIEW® TEST GENERATOR

ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize. PearsonRealize.com

Assessment

Topic Assessment Masters



Name _____ Topic 9 Assessment

1. Archie can walk 1 mile in $\frac{1}{3}$ hour. How far can he walk in 3 hours? 1 point
   - (A) 9 miles
   - (B) 3 miles
   - (C) $\frac{1}{3}$ mile
   - (D) $\frac{1}{9}$ mile

2. For questions 2a–2d, choose Yes or No to tell if the number 7 will make each equation true. 1 point
   - 2a. $4 \div \square = \frac{4}{7}$ — Yes / No
   - 2b. $\square \div 14 = \frac{1}{2}$ — Yes / No
   - 2c. $1 \div 7 = \square$ — Yes / No
   - 2d. $3 \div \square = \frac{7}{3}$ — Yes / No

3. Diana has 9 pounds of potting soil. She is putting $\frac{1}{4}$ pound of soil in each flowerpot. How many flowerpots can Diana prepare with soil? 1 point

   36 flowerpots

4. How many $\frac{1}{5}$s are in 31? 1 point

   279

5. Tomás is cutting a board into $\frac{1}{3}$-yard pieces. If the board is 3 yards long, how many pieces can Tomás cut? Use the number line. 1 point

   0 1 2 3

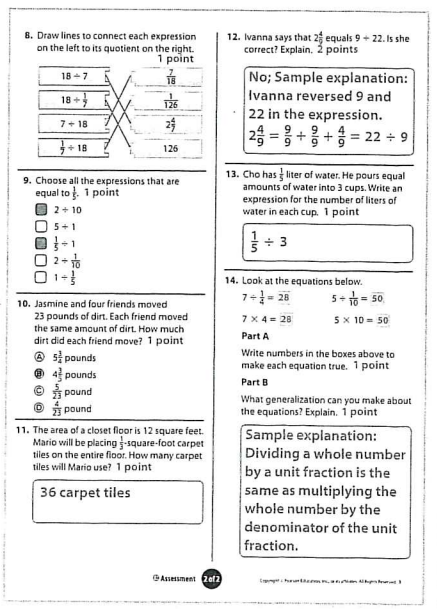
   - (A) $\frac{1}{12}$
   - (B) $\frac{3}{4}$
   - (C) 4
   - (D) 12

6. A baker has 15 cups of flour. He sets aside 4 cups of flour, and uses the rest for a cookie recipe that calls for $\frac{1}{2}$ cup of flour. How many batches of cookies can the baker make? 1 point
   - (A) 11
   - (B) 15
   - (C) 22
   - (D) 30

7. A relay race is $\frac{1}{4}$ mile long and is run by 4-member teams. If each team member runs the same distance, what fraction of a mile does each team member run? Explain how you found your answer. 2 points

   $\frac{1}{16}$ mile; Sample explanation: I divided $\frac{1}{4}$ by 4.

Assessment 1 of 2



8. Draw lines to connect each expression on the left to its quotient on the right. 1 point

$18 \div 7$	$\frac{7}{18}$
$18 \div \frac{1}{7}$	$\frac{1}{126}$
$7 \div 18$	$2\frac{4}{7}$
$\frac{1}{7} \div 18$	126

9. Choose all the expressions that are equal to $\frac{1}{2}$. 1 point
   - ☑ $2 \div 10$
   - ☐ $5 \div 1$
   - ☑ $\frac{1}{2} \div 1$
   - ☐ $2 \div \frac{1}{10}$
   - ☐ $1 \div \frac{1}{5}$

10. Jasmine and four friends moved 23 pounds of dirt. Each friend moved the same amount of dirt. How much dirt did each friend move? 1 point
    - (A) $5\frac{1}{2}$ pounds
    - (B) $4\frac{1}{3}$ pounds
    - (C) $\frac{5}{23}$ pound
    - (D) $\frac{4}{23}$ pound

11. The area of a closet floor is 12 square feet. Mario will be placing $\frac{1}{3}$-square-foot carpet tiles on the entire floor. How many carpet tiles will Mario use? 1 point

    36 carpet tiles

12. Ivanna says that $2\frac{4}{9}$ equals $9 \div 22$. Is she correct? Explain. 2 points

    No; Sample explanation: Ivanna reversed 9 and 22 in the expression. $2\frac{4}{9} = \frac{9}{9} + \frac{9}{9} + \frac{4}{9} = 22 \div 9$

13. Cho has $\frac{1}{5}$ liter of water. He pours equal amounts of water into 3 cups. Write an expression for the number of liters of water in each cup. 1 point

    $\frac{1}{5} \div 3$

14. Look at the equations below.

    $7 \div \frac{1}{4} = 28$ $\quad 5 \div \frac{1}{10} = 50$

    $7 \times 4 = 28$ $\quad 5 \times 10 = 50$

    Part A

    Write numbers in the boxes above to make each equation true. 1 point

    Part B

    What generalization can you make about the equations? Explain. 1 point

    Sample explanation: Dividing a whole number by a unit fraction is the same as multiplying the whole number by the denominator of the unit fraction.

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected.
2	1	All correct choices selected.
3	1	Correct answer
4	1	Correct answer
5	1	Correct choice selected.
6	1	Correct choice selected.
7	2	Correct answer and correct explanation
	1	Correct answer only
8	1	All correct matches
9	1	All correct choices selected.
10	1	Correct choice selected.
11	1	Correct answer
12	2	Correct answer and correct explanation
	1	Correct answer only
13	1	Correct expression
14A	1	Correct answer for each write-in box
14B	1	Correct explanation

RTI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1	5.NF.B.7b, 5.NF.B.7c	1	H86
2	5.NF.B.3	1	H17
3	5.NF.B.7b, 5.NF.B.7c	1	H86
4	5.NF.B.7b	1	H86
5	5.NF.B.7b, 5.NF.B.7c	1	H86
6	5.NF.B.7c	1	H86
7	5.NF.B.7a, 5.NF.B.7c	2	H87
8	5.NF.B.7a, 5.NF.B.7b	2	H86, H87
9	5.NF.B.7a, 5.NF.B.7b	1	H17
10	5.NF.B.3	1	H17
11	5.NF.B.7b, 5.NF.B.7c	1	H86
12	5.NF.B.3	2	H17
13	5.NF.B.7c	1	H87
14	5.NF.B.7a, 5.NF.B.7b, MP.8	3	H86

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT

An auto-scored Topic Assessment is provided at PearsonRealize.com.

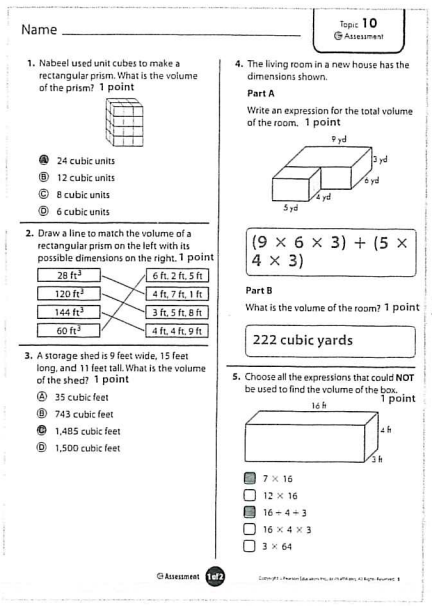
EXAMVIEW® TEST GENERATOR

ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com

Assessment

Topic Assessment Masters



Name _____ Topic 10 Assessment

1. Nabeel used unit cubes to make a rectangular prism. What is the volume of the prism? 1 point

Ⓐ 24 cubic units
Ⓑ 12 cubic units
Ⓒ 8 cubic units
Ⓓ 6 cubic units

2. Draw a line to match the volume of a rectangular prism on the left with its possible dimensions on the right. 1 point

28 ft³	6 ft, 2 ft, 5 ft
120 ft³	4 ft, 7 ft, 1 ft
144 ft³	3 ft, 5 ft, 8 ft
60 ft³	4 ft, 4 ft, 9 ft

3. A storage shed is 9 feet wide, 15 feet long, and 11 feet tall. What is the volume of the shed? 1 point

Ⓐ 35 cubic feet
Ⓑ 743 cubic feet
Ⓒ 1,485 cubic feet
Ⓓ 1,500 cubic feet

4. The living room in a new house has the dimensions shown.

Part A

Write an expression for the total volume of the room. 1 point

9 yd, 3 yd, 6 yd, 4 yd, 5 yd

(9 × 6 × 3) + (5 × 4 × 3)

Part B

What is the volume of the room? 1 point

222 cubic yards

5. Choose all the expressions that could NOT be used to find the volume of the box. 1 point

16 ft, 4 ft, 3 ft

- [ ] 7 × 16
- [ ] 12 × 16
- [x] 16 − 4 − 3
- [ ] 16 × 4 × 3
- [ ] 3 × 64

Assessment 1 of 2

6. Kyle needs to fill the wooden platform he made to make it more stable. What is the volume of the platform? 1 point

8 in., 9 in., 5 in., 6 in., 12 in.

Ⓐ 46 cubic inches
Ⓑ 92 cubic inches
Ⓒ 529 cubic inches
Ⓓ 792 cubic inches

7. A brick wall will be shaped like a rectangular prism. The wall needs to be 3 feet tall, and the builders have enough bricks for the wall to have a volume of 330 cubic feet.

Part A

What tool can help find possible dimensions for the base of the wall? Explain. 2 points

Unit cubes, each representing 1 ft³. Then, the 330 cubes can be used to find how the base could look when the height is 3.

Part B

Give one pair of possible whole-number dimensions for the base. 1 point

Possible answers:
1 ft × 110 ft, 2 ft × 55 ft, 5 ft × 22 ft, 10 ft × 11 ft

8. What is the volume of the room shown? 1 point

11 ft, Area of base: 96 ft²

1,056 cubic feet

9. One cereal box has a volume of 462 cubic inches. Another cereal box measures 12 inches tall, 8 inches long, and 3 inches wide. What is the combined volume of the two cereal boxes? 1 point

750 cubic inches

10. For questions 10a–10d, choose Yes or No. Can the expression be used to find the volume of the rectangular prism in cubic feet? 1 point

9 ft, 7 ft, 5 ft

10a. 35 × 9	● Yes	○ No
10b. 12 × 9	○ Yes	● No
10c. (9 × 7) × 5	● Yes	○ No
10d. (5 × 7) + 9	○ Yes	● No

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected.
2	1	All matches correct
3	1	Correct choice selected.
4	2	Correct expression in Part A and correct answer in Part B
	1	Correct expression in Part A or correct answer in Part B
5	1	All correct choices selected.
6	1	Correct choice selected.
7A	2	Correct explanation
	1	Partially correct explanation
7B	1	Correct pair of numbers
8	1	Correct answer
9	1	Correct answer
10	1	All correct choices selected.

RTI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1	5.MD.C.3a, 5.MD.C.3b	1	154
2	5.MD.C.5b	1	155
3	5.MD.C.5a, 5.MD.C.5b	1	155
4A	5.MD.C.5c	2	172
4B	5.MD.C.5b, 5.MD.C.5c	1	172
5	5.MD.C.5b	1	155
6	5.MD.C.5c	2	172
7A	5.MD.C.5b, MP.5	2	155
7B	5.MD.C.5b	1	172
8	5.MD.C.5b	1	155
9	5.MD.C.5c	2	155
10	5.MD.C.5b	1	155

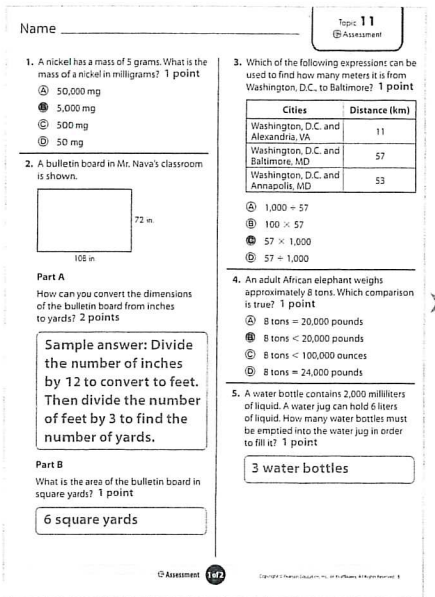
The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT
An auto-scored Topic Assessment is provided at PearsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com
Assessment

Topic Assessment Masters



Name _____ Topic 11 Assessment

1. A nickel has a mass of 5 grams. What is the mass of a nickel in milligrams? 1 point
   (A) 50,000 mg
   (B) 5,000 mg
   (C) 500 mg
   (D) 50 mg

2. A bulletin board in Mr. Nava's classroom is shown.
   72 in. 108 in.
   Part A
   How can you convert the dimensions of the bulletin board from inches to yards? 2 points
   Sample answer: Divide the number of inches by 12 to convert to feet. Then divide the number of feet by 3 to find the number of yards.
   Part B
   What is the area of the bulletin board in square yards? 1 point
   6 square yards

3. Which of the following expressions can be used to find how many meters it is from Washington, D.C., to Baltimore? 1 point

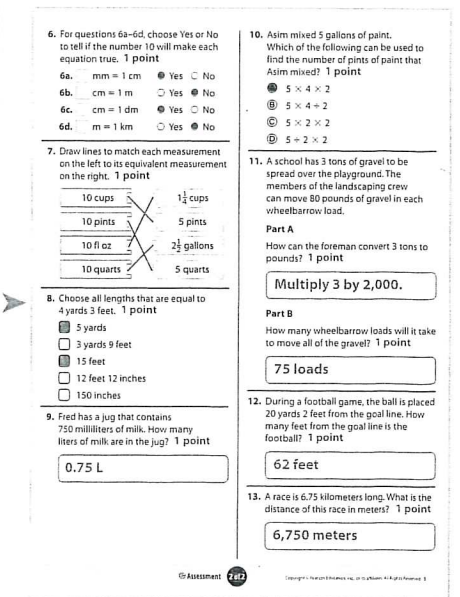
Cities	Distance (km)
Washington, D.C. and Alexandria, VA	11
Washington, D.C. and Baltimore, MD	57
Washington, D.C. and Annapolis, MD	53

   (A) 1,000 ÷ 57
   (B) 100 × 57
   (C) 57 × 1,000
   (D) 57 ÷ 1,000

4. An adult African elephant weighs approximately 8 tons. Which comparison is true? 1 point
   (A) 8 tons = 20,000 pounds
   (B) 8 tons < 20,000 pounds
   (C) 8 tons < 100,000 ounces
   (D) 8 tons = 24,000 pounds

5. A water bottle contains 2,000 milliliters of liquid. A water jug can hold 6 liters of liquid. How many water bottles must be emptied into the water jug in order to fill it? 1 point
   3 water bottles

Assessment 1 of 2



6. For questions 6a–6d, choose Yes or No to tell if the number 10 will make each equation true. 1 point
   6a. mm = 1 cm ● Yes ○ No
   6b. cm = 1 m ○ Yes ● No
   6c. cm = 1 dm ● Yes ○ No
   6d. m = 1 km ○ Yes ● No

7. Draw lines to match each measurement on the left to its equivalent measurement on the right. 1 point
   10 cups — $1\frac{1}{4}$ cups
   10 pints — 5 pints
   10 fl oz — $2\frac{1}{2}$ gallons
   10 quarts — 5 quarts

8. Choose all lengths that are equal to 4 yards 3 feet. 1 point
   ☑ 5 yards
   ☐ 3 yards 9 feet
   ☑ 15 feet
   ☐ 12 feet 12 inches
   ☐ 150 inches

9. Fred has a jug that contains 750 milliliters of milk. How many liters of milk are in the jug? 1 point
   0.75 L

10. Asim mixed 5 gallons of paint. Which of the following can be used to find the number of pints of paint that Asim mixed? 1 point
    (A) 5 × 4 × 2
    (B) 5 × 4 ÷ 2
    (C) 5 × 2 × 2
    (D) 5 ÷ 2 × 2

11. A school has 3 tons of gravel to be spread over the playground. The members of the landscaping crew can move 80 pounds of gravel in each wheelbarrow load.
    Part A
    How can the foreman convert 3 tons to pounds? 1 point
    Multiply 3 by 2,000.
    Part B
    How many wheelbarrow loads will it take to move all of the gravel? 1 point
    75 loads

12. During a football game, the ball is placed 20 yards 2 feet from the goal line. How many feet from the goal line is the football? 1 point
    62 feet

13. A race is 6.75 kilometers long. What is the distance of this race in meters? 1 point
    6,750 meters

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected.
2	3	Correct answers to Part A and Part B
	2	Partially correct answer to Part A and correct answer to Part B
	1	Partially correct answer to Part A or correct answer to Part B
3	1	Correct choice selected.
4	1	Correct choice selected.
5	1	Correct answer
6	1	All correct choices selected.
7	1	All correct choices selected.
8	1	All correct choices selected.
9	1	Correct answer
10	1	Correct choice selected.
11	2	Correct answers to Part A and Part B
	1	Correct answer to Part A or Part B
12	1	Correct answer
13	1	Correct answer

RtI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1	5.MD.A.1, 5.NBT.A.2	1	I27, I35
2A	5.MD.A.1, 5.NBT.B.5	2	I32, J1
2B	5.MD.A.1, 5.NBT.B.5	1	I32, I37, J1
3	5.MD.A.1, 5.NBT.A.2	1	I27, I35
4	5.MD.A.1, 5.NBT.B.6	1	I26, I34
5	5.MD.A.1, 5.NBT.A.2	1	I25, I35
6	5.MD.A.1, 5.NBT.A.2	1	I23, I35
7	5.MD.A.1, 5.NBT.B.5, 5.NBT.B.6	1	I24, I33
8	5.MD.A.1, 5.NBT.B.5, 5.NBT.B.6, MP.6	2	I22, I32
9	5.MD.A.1, 5.NBT.A.2	1	I35, J1
10	5.MD.A.1, 5.NBT.B.5, 5.NBT.B.6	2	I24, I33
11A	5.MD.A.1, 5.NBT.B.5	1	I34, J1
11B	5.MD.A.1, 5.NBT.B.5	1	I34, I37, J1
12	5.MD.A.1, 5.NBT.B.5	2	I32, J1
13	5.MD.A.1, 5.NBT.A.2	1	I23, I35

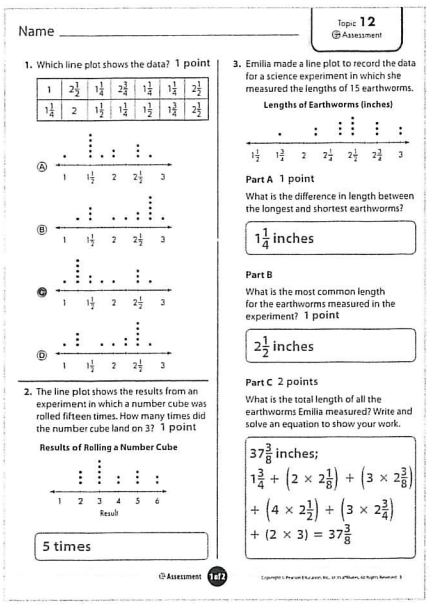
The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT
An auto-scored Topic Assessment is provided at PearsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com
Assessment

Topic Assessment Masters


Name _____ Topic 12 Assessment

1. Which line plot shows the data? 1 point

1	$2\frac{1}{2}$	$1\frac{1}{4}$	$2\frac{3}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	$2\frac{1}{2}$
$1\frac{1}{4}$	2	$1\frac{1}{2}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$2\frac{1}{2}$

Ⓐ Ⓑ Ⓒ Ⓓ

2. The line plot shows the results from an experiment in which a number cube was rolled fifteen times. How many times did the number cube land on 3? 1 point

Results of Rolling a Number Cube

5 times

3. Emilia made a line plot to record the data for a science experiment in which she measured the lengths of 15 earthworms.

Lengths of Earthworms (inches)

Part A 1 point

What is the difference in length between the longest and shortest earthworms?

$1\frac{1}{4}$ inches

Part B

What is the most common length for the earthworms measured in the experiment? 1 point

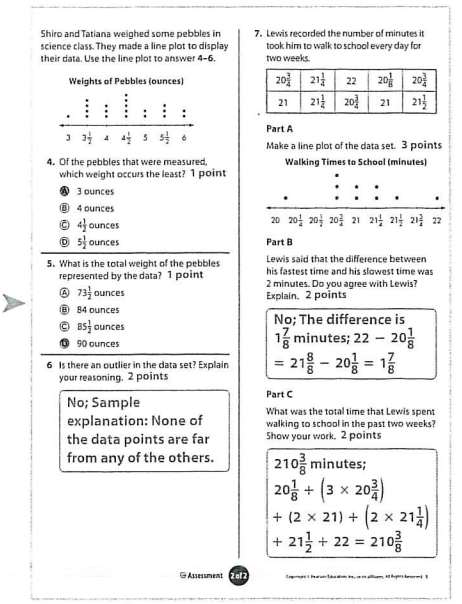
$2\frac{1}{2}$ inches

Part C 2 points

What is the total length of all the earthworms Emilia measured? Write and solve an equation to show your work.

$37\frac{3}{8}$ inches;
$1\frac{3}{4} + \left(2 \times 2\frac{1}{8}\right) + \left(3 \times 2\frac{3}{8}\right) + \left(4 \times 2\frac{1}{2}\right) + \left(3 \times 2\frac{3}{4}\right) + (2 \times 3) = 37\frac{3}{8}$

Assessment 1 of 2


Shiro and Tatiana weighed some pebbles in science class. They made a line plot to display their data. Use the line plot to answer 4–6.

Weights of Pebbles (ounces)

4. Of the pebbles that were measured, which weight occurs the least? 1 point

Ⓐ 3 ounces
Ⓑ 4 ounces
Ⓒ $4\frac{1}{2}$ ounces
Ⓓ $5\frac{1}{2}$ ounces

5. What is the total weight of the pebbles represented by the data? 1 point

Ⓐ $73\frac{1}{2}$ ounces
Ⓑ 84 ounces
Ⓒ $85\frac{1}{2}$ ounces
Ⓓ 90 ounces

6. Is there an outlier in the data set? Explain your reasoning. 2 points

No; Sample explanation: None of the data points are far from any of the others.

7. Lewis recorded the number of minutes it took him to walk to school every day for two weeks.

$20\frac{3}{8}$	$21\frac{1}{4}$	22	$20\frac{1}{8}$	$20\frac{3}{4}$	
21	$21\frac{1}{4}$	$20\frac{3}{4}$	21	$21\frac{1}{2}$	

Part A

Make a line plot of the data set. 3 points

Walking Times to School (minutes)

Part B

Lewis said that the difference between his fastest time and his slowest time was 2 minutes. Do you agree with Lewis? Explain. 2 points

No; The difference is $1\frac{7}{8}$ minutes; $22 - 20\frac{1}{8} = 21\frac{8}{8} - 20\frac{1}{8} = 1\frac{7}{8}$

Part C

What was the total time that Lewis spent walking to school in the past two weeks? Show your work. 2 points

$210\frac{3}{8}$ minutes;
$20\frac{1}{8} + \left(3 \times 20\frac{3}{4}\right) + (2 \times 21) + \left(2 \times 21\frac{1}{4}\right) + 21\frac{1}{2} + 22 = 210\frac{3}{8}$

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected
2	1	Correct answer
3A	1	Correct answer
3B	1	Correct answer
3C	2	Correct answer and work shown.
	1	Correct answer only
4	1	Correct choice selected.
5	1	Correct choice selected.
6	2	Correct answer and correct explanation
	1	Correct answer only
7A	3	Correct line plot
	2	1 or 2 errors in line plot
	1	More than 2 errors in line plot
7B	2	Correct answer and correct explanation
	1	Correct answer only
7C	2	Correct answer and correct work
	1	Correct answer only

RtI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1	5.MD.B.2	1	I71
2	5.MD.B.2	1	I71
3A	5.MD.B.2, 5.NF.A.2	1	H46, I71
3B	5.MD.B.2	1	I71
3C	5.MD.B.2, 5.NF.A.2, 5.NF.B.6	1	H45, H47, I71
4	5.MD.B.2	1	I71
5	5.MD.B.2, 5.NF.A.2, 5.NF.B.6	1	H45, I71
6	5.MD.B.2	2	I71
7A	5.MD.B.2	3	I71
7B	5.MD.B.2, 5.NF.A.2, MP.3	2	H46, I71
7C	5.MD.B.2, 5.NF.A.2, 5.NF.B.6	1	H45, I71

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

ONLINE TOPIC ASSESSMENT

An auto-scored Topic Assessment is provided at PearsonRealize.com.

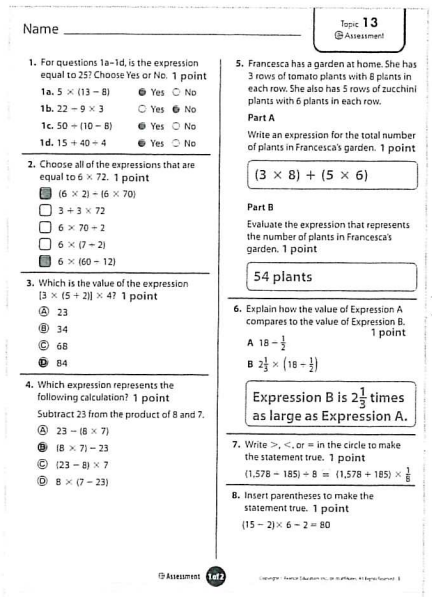
EXAMVIEW® TEST GENERATOR

ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize. PearsonRealize.com

Assessment

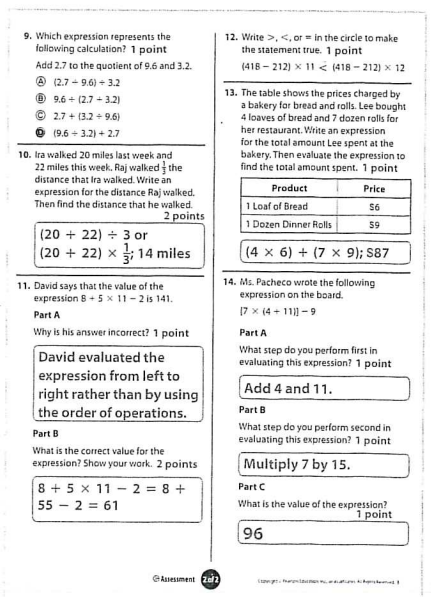
Topic Assessment Masters



Name _____ Topic 13 Assessment

1. For questions 1a–1d, is the expression equal to 25? Choose Yes or No. 1 point
   1a. 5 × (13 − 8) ● Yes ○ No
   1b. 22 − 9 × 3 ○ Yes ● No
   1c. 50 ÷ (10 − 8) ● Yes ○ No
   1d. 15 + 40 ÷ 4 ● Yes ○ No
2. Choose all of the expressions that are equal to 6 × 72. 1 point
   ■ (6 × 2) ÷ (6 × 70)
   □ 3 + 3 × 72
   □ 6 × 70 ÷ 2
   □ 6 × (7 − 2)
   ■ 6 × (60 − 12)
3. Which is the value of the expression [3 × (5 + 2)] × 4? 1 point
   Ⓐ 23
   Ⓑ 34
   Ⓒ 68
   Ⓓ 84
4. Which expression represents the following calculation? 1 point
   Subtract 23 from the product of 8 and 7.
   Ⓐ 23 − (8 × 7)
   Ⓑ (8 × 7) − 23
   Ⓒ (23 − 8) × 7
   Ⓓ 8 × (7 − 23)
5. Francesca has a garden at home. She has 3 rows of tomato plants with 8 plants in each row. She also has 5 rows of zucchini plants with 6 plants in each row.
   Part A
   Write an expression for the total number of plants in Francesca's garden. 1 point
   (3 × 8) + (5 × 6)
   Part B
   Evaluate the expression that represents the number of plants in Francesca's garden. 1 point
   54 plants
6. Explain how the value of Expression A compares to the value of Expression B. 1 point
   A $18 - \frac{1}{2}$
   B $2\frac{1}{3} \times \left(18 - \frac{1}{2}\right)$
   Expression B is $2\frac{1}{3}$ times as large as Expression A.
7. Write >, <, or = in the circle to make the statement true. 1 point
   (1,578 − 185) ÷ 8 ○ (1,578 + 185) × $\frac{1}{8}$
8. Insert parentheses to make the statement true. 1 point
   (15 − 2) × 6 − 2 = 80

Assessment 1 of 2



9. Which expression represents the following calculation? 1 point
   Add 2.7 to the quotient of 9.6 and 3.2.
   Ⓐ (2.7 + 9.6) ÷ 3.2
   Ⓑ 9.6 ÷ (2.7 + 3.2)
   Ⓒ 2.7 + (3.2 ÷ 9.6)
   Ⓓ (9.6 ÷ 3.2) + 2.7
10. Ira walked 20 miles last week and 22 miles this week. Raj walked $\frac{1}{3}$ the distance that Ira walked. Write an expression for the distance Raj walked. Then find the distance that he walked. 2 points
    (20 + 22) ÷ 3 or (20 + 22) × $\frac{1}{3}$; 14 miles
11. David says that the value of the expression 8 + 5 × 11 − 2 is 141.
    Part A
    Why is his answer incorrect? 1 point
    David evaluated the expression from left to right rather than by using the order of operations.
    Part B
    What is the correct value for the expression? Show your work. 2 points
    8 + 5 × 11 − 2 = 8 + 55 − 2 = 61
12. Write >, <, or = in the circle to make the statement true. 1 point
    (418 − 212) × 11 ○ (418 − 212) × 12
13. The table shows the prices charged by a bakery for bread and rolls. Lee bought 4 loaves of bread and 7 dozen rolls for her restaurant. Write an expression for the total amount Lee spent at the bakery. Then evaluate the expression to find the total amount spent. 1 point

Product	Price
1 Loaf of Bread	$6
1 Dozen Dinner Rolls	$9

    (4 × 6) + (7 × 9); $87
14. Ms. Pacheco wrote the following expression on the board.
    [7 × (4 + 11)] − 9
    Part A
    What step do you perform first in evaluating this expression? 1 point
    Add 4 and 11.
    Part B
    What step do you perform second in evaluating this expression? 1 point
    Multiply 7 by 15.
    Part C
    What is the value of the expression? 1 point
    96

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choices selected.
2	1	Correct choices selected.
3	1	Correct choice selected.
4	1	Correct choice selected.
5	2	Correct expression and answer for Part A and Part B
6	1	Correct description
7	1	Correct answer
8	1	Correct answer
9	1	Correct choice selected.
10	2	Correct expression and correct answer
11	3	Correct answer and work for Part A and Part B
12	1	Correct answer
13	1	Correct expression and correct answer
14	3	Correct answers for all Parts

RtI Item Analysis for Diagnosis and Intervention

Item	© Standard	DOK	MDIS
1	5.OA.A.1	1	F40, F41
2	5.OA.A.1	1	F40, F41
3	5.OA.A.1	1	F40, F41
4	5.OA.A.1, 5.OA.A.2	1	F37, F41
5A	5.OA.A.2	1	F37, F41
5B	5.OA.A.1	1	F41
6	5.OA.A.2, MP.2	2	F41
7	5.OA.A.2	1	F38, F41
8	5.OA.A.1	1	F40, F41
9	5.OA.A.1, 5.OA.A.2	1	F37, F41
10	5.OA.A.1, 5.OA.A.2	1	F37, F41
11A	5.OA.A.1	3	F41
11B	5.OA.A.1	2	F41
12	5.OA.A.2	1	F38, F41
13	5.OA.A.1, 5.OA.A.2	1	F37, F40, F41
14	5.OA.A.1	2	F40, F41

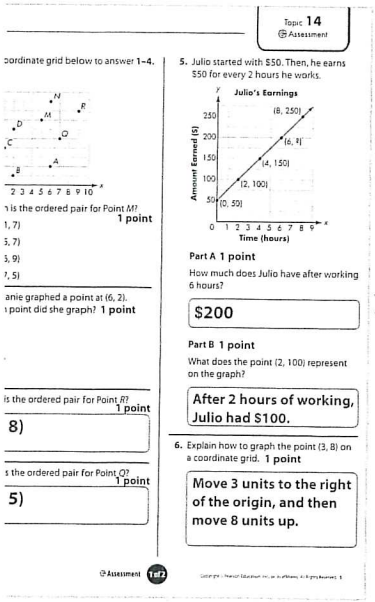
The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

NE TOPIC ASSESSMENT
o-scored Topic Assessment is provided
rsonRealize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com
Assessment

Topic Assessment Masters


Topic 14
Assessment

coordinate grid below to answer 1–4.

is the ordered pair for Point M? 1 point
1, 7)
5, 7)
3, 9)
7, 5)

anie graphed a point at (6, 2).
point did she graph? 1 point

is the ordered pair for Point P? 1 point
8)

s the ordered pair for Point Q? 1 point
5)

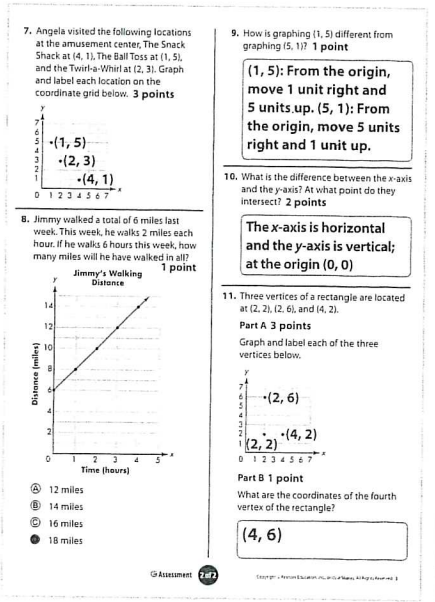
5. Julio started with $50. Then, he earns $50 for every 2 hours he works.

Part A 1 point
How much does Julio have after working 6 hours?
$200

Part B 1 point
What does the point (2, 100) represent on the graph?
After 2 hours of working, Julio had $100.

6. Explain how to graph the point (3, 8) on a coordinate grid. 1 point
Move 3 units to the right of the origin, and then move 8 units up.

Assessment 1of2


7. Angela visited the following locations at the amusement center, The Snack Shack at (4, 1), The Ball Toss at (1, 5), and the Twirl-a-Whirl at (2, 3). Graph and label each location on the coordinate grid below. 3 points

8. Jimmy walked a total of 6 miles last week. This week, he walks 2 miles each hour. If he walks 6 hours this week, how many miles will he have walked in all? 1 point
Ⓐ 12 miles
Ⓑ 14 miles
Ⓒ 16 miles
● 18 miles

9. How is graphing (1, 5) different from graphing (5, 1)? 1 point
(1, 5): From the origin, move 1 unit right and 5 units up. (5, 1): From the origin, move 5 units right and 1 unit up.

10. What is the difference between the x-axis and the y-axis? At what point do they intersect? 2 points
The x-axis is horizontal and the y-axis is vertical; at the origin (0, 0)

11. Three vertices of a rectangle are located at (2, 2), (2, 6), and (4, 2).

Part A 3 points
Graph and label each of the three vertices below.

Part B 1 point
What are the coordinates of the fourth vertex of the rectangle?
(4, 6)

Assessment 2of2

Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1	5.G.A.1	1	F32
2	5.G.A.1	1	F32
3	5.G.A.1	1	F32
4	5.G.A.1	1	F32
5A	5.G.A.1, 5.G.A.2	1	F32
5B	5.G.A.1, 5.G.A.2	1	F32
6	5.G.A.1	1	F32
7	5.G.A.1, 5.G.A.2	2	F32
8	5.G.A.1, 5.G.A.2	2	F32
9	5.G.A.1, MP.2	1	F32
10	5.G.A.1	2	F32
11A	5.G.A.1, 5.G.A.2	1	F32
11B	5.G.A.1, 5.G.A.2	2	F32

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.

Scoring Guide

oints	Topic Assessment (Student's Edition and Masters)
1	Correct choice selected.
1	Correct choice selected.
1	Correct answer
1	Correct answer
1	Correct answer
1	Correct answer
1	Correct explanation
3	All three correct points on graph
2	Two correct points on graph
1	One correct point on graph

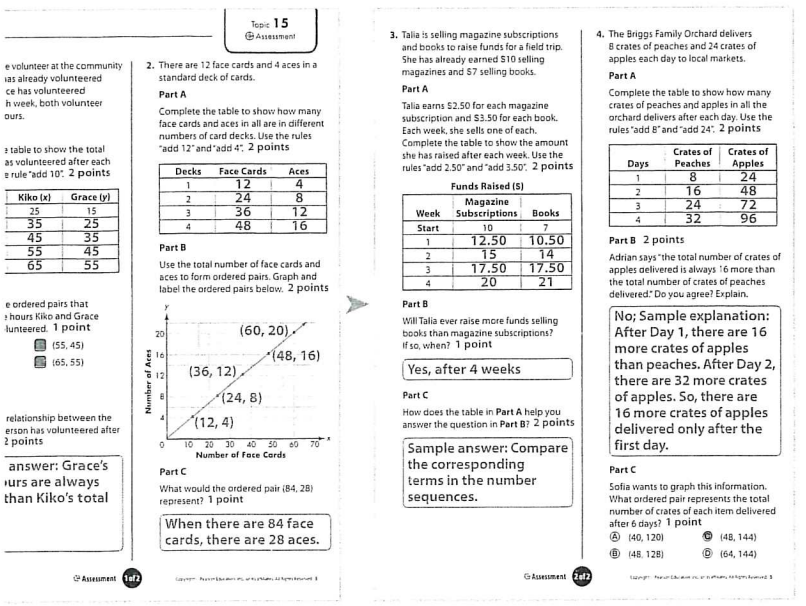
Item	Points	Topic Assessment (Student's Edition and Masters)
8	1	Correct choice selected.
9	1	Correct explanation
10	2	Correct answers to both questions
	1	Correct answer to one question
11A	3	All three correct points on graph
	2	Two correct points on graph
	1	One correct point on graph
11B	1	Correct answer

TOPIC ASSESSMENT
ored Topic Assessment is provided
Realize.com.

EXAMVIEW® TEST GENERATOR
ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com
Assessment

Topic Assessment Masters



Topic 15
Assessment

e volunteer at the community
as already volunteered
ce has volunteered
h week, both volunteer
ours.

table to show the total
as volunteered after each
e rule "add 10". 2 points

Kiko (x)	Grace (y)
25	15
35	25
45	35
55	45
65	55

e ordered pairs that
hours Kiko and Grace
lunteered. 1 point
(55, 45)
(65, 55)

relationship between the
erson has volunteered after
2 points

answer: Grace's
urs are always
than Kiko's total

2. There are 12 face cards and 4 aces in a standard deck of cards.

Part A

Complete the table to show how many face cards and aces in all are in different numbers of card decks. Use the rules "add 12" and "add 4". 2 points

Decks	Face Cards	Aces
1	12	4
2	24	8
3	36	12
4	48	16

Part B

Use the total number of face cards and aces to form ordered pairs. Graph and label the ordered pairs below. 2 points

Part C

What would the ordered pair (84, 28) represent? 1 point

When there are 84 face cards, there are 28 aces.

Assessment 1of2

3. Talia is selling magazine subscriptions and books to raise funds for a field trip. She has already earned $10 selling magazines and $7 selling books.

Part A

Talia earns $2.50 for each magazine subscription and $3.50 for each book. Each week, she sells one of each. Complete the table to show the amount she has raised after each week. Use the rules "add 2.50" and "add 3.50". 2 points

Funds Raised ($)

Week	Magazine Subscriptions	Books
Start	10	7
1	12.50	10.50
2	15	14
3	17.50	17.50
4	20	21

Part B

Will Talia ever raise more funds selling books than magazine subscriptions? If so, when? 1 point

Yes, after 4 weeks

Part C

How does the table in **Part A** help you answer the question in **Part B**? 2 points

Sample answer: Compare the corresponding terms in the number sequences.

4. The Briggs Family Orchard delivers 8 crates of peaches and 24 crates of apples each day to local markets.

Part A

Complete the table to show how many crates of peaches and apples in all the orchard delivers after each day. Use the rules "add 8" and "add 24". 2 points

Days	Crates of Peaches	Crates of Apples
1	8	24
2	16	48
3	24	72
4	32	96

Part B 2 points

Adrian says "the total number of crates of apples delivered is always 16 more than the total number of crates of peaches delivered." Do you agree? Explain.

No; Sample explanation: After Day 1, there are 16 more crates of apples than peaches. After Day 2, there are 32 more crates of apples. So, there are 16 more crates of apples delivered only after the first day.

Part C

Sofia wants to graph this information. What ordered pair represents the total number of crates of each item delivered after 6 days? 1 point

Ⓐ (40, 120) Ⓒ (48, 144)
Ⓑ (48, 128) Ⓓ (64, 144)

Assessment 2of2

Assessment Masters assess the same content item for item as the
essment in the Student's Edition.

RtI Item Analysis for Diagnosis and Intervention

Item	Standard	DOK	MDIS
1A	5.OA.B.3	1	F25, F26
1B	5.OA.B.3	1	F26, F32
1C	5.OA.B.3, 5.G.A.2	2	F26
2A	5.OA.B.3	1	F26
2B	5.OA.B.3, 5.G.A.2	1	F26, F32, J30
2C	5.OA.B.3, 5.G.A.2	2	F26, F32
3A	5.OA.B.3, MP.1	1	F26
3B	5.OA.B.3, MP.1	2	F26
3C	5.OA.B.3	2	F26
4A	5.OA.B.3	1	F26
4B	5.OA.B.3	2	F26
4C	5.OA.B.3, 5.G.A.2	2	F26, F32

Scoring Guide

nts	Topic Assessment (Student's Edition and Masters)
	All answers in the table correct
	Half the answers in the table correct
	All correct choices selected.
	Correct explanation
	Partially correct explanation
	All answers in the table correct
	Half the answers in the table correct
	Five points plotted correctly on graph.
	Three points plotted correctly on graph.
	Correct explanation

Item	Points	Topic Assessment (Student's Edition and Masters)
3A	2	All answers in the table correct
	1	Half the answers in the table correct
3B	1	Correct answer and explanation
3C	2	Correct explanation
	1	Partially correct explanation
4A	2	All answers in the table correct
	1	Half the answers in the table correct
4B	2	Correct answer and explanation
	1	Correct answer only or partially correct explanation
4C	1	Correct choice selected.

NLINE TOPIC ASSESSMENT

auto-scored Topic Assessment is provided PearsonRealize.com.

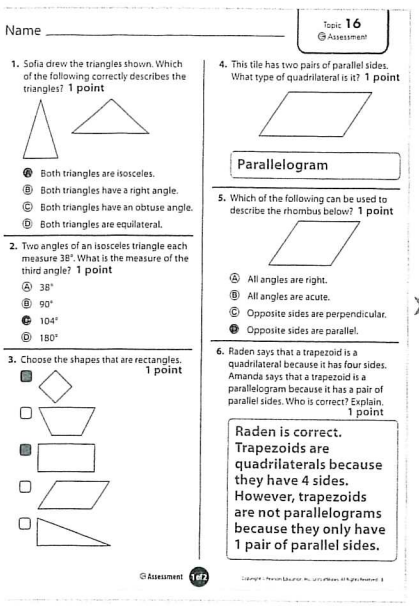
EXAMVIEW® TEST GENERATOR

ExamView can be used to create a blackline-master Topic Assessment with multiple-choice and free-response items.

PEARSON realize.
PearsonRealize.com

Assessment

Topic Assessment Masters



Name _____ Topic 16 Assessment

1. Sofia drew the triangles shown. Which of the following correctly describes the triangles? **1 point**

(A) Both triangles are isosceles.
(B) Both triangles have a right angle.
(C) Both triangles have an obtuse angle.
(D) Both triangles are equilateral.

2. Two angles of an isosceles triangle each measure 38°. What is the measure of the third angle? **1 point**

(A) 38°
(B) 90°
(C) 104°
(D) 180°

3. Choose the shapes that are rectangles. **1 point**

4. This tile has two pairs of parallel sides. What type of quadrilateral is it? **1 point**

Parallelogram

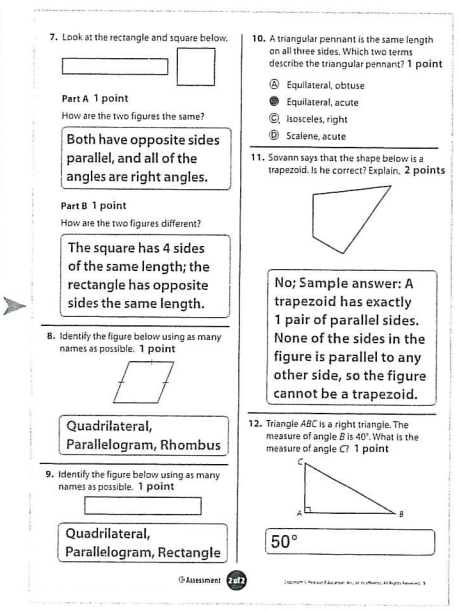
5. Which of the following can be used to describe the rhombus below? **1 point**

(A) All angles are right.
(B) All angles are acute.
(C) Opposite sides are perpendicular.
(D) Opposite sides are parallel.

6. Raden says that a trapezoid is a quadrilateral because it has four sides. Amanda says that a trapezoid is a parallelogram because it has a pair of parallel sides. Who is correct? Explain. **1 point**

Raden is correct. Trapezoids are quadrilaterals because they have 4 sides. However, trapezoids are not parallelograms because they only have 1 pair of parallel sides.

Assessment 1 of 2



7. Look at the rectangle and square below.

Part A 1 point

How are the two figures the same?

Both have opposite sides parallel, and all of the angles are right angles.

Part B 1 point

How are the two figures different?

The square has 4 sides of the same length; the rectangle has opposite sides the same length.

8. Identify the figure below using as many names as possible. **1 point**

Quadrilateral, Parallelogram, Rhombus

9. Identify the figure below using as many names as possible. **1 point**

Quadrilateral, Parallelogram, Rectangle

10. A triangular pennant is the same length on all three sides. Which two terms describe the triangular pennant? **1 point**

(A) Equilateral, obtuse
(B) Equilateral, acute
(C) Isosceles, right
(D) Scalene, acute

11. Sovann says that the shape below is a trapezoid. Is he correct? Explain. **2 points**

No; Sample answer: A trapezoid has exactly 1 pair of parallel sides. None of the sides in the figure is parallel to any other side, so the figure cannot be a trapezoid.

12. Triangle *ABC* is a right triangle. The measure of angle *B* is 40°. What is the measure of angle *C*? **1 point**

50°

Assessment 2 of 2

Scoring Guide

Item	Points	Topic Assessment (Student's Edition and Masters)
1	1	Correct choice selected
2	1	Correct choice selected
3	1	All correct choices selected
4	1	Correct answer
5	1	Correct choice selected
6	2	Correct answer and explanation
	1	Correct answer only
7	2	Correct answer to Part A and Part B
	1	Correct answer to Part A or Part B
8	1	Two correct answers
9	1	Two correct answers
10	1	Correct choice selected
11	2	Correct answer and correct explanation
	1	Correct answer only
12	1	Correct answer

RtI Item Analysis for Diagnosis and Intervention

Item	© Standard	DOK	MDIS
1	5.G.B.3, 5.G.B.4	1	15
2	5.G.B.3, 5.G.B.4	1	15
3	5.G.B.3, 5.G.B.4	1	16
4	5.G.B.3, 5.G.B.4	1	16
5	5.G.B.3, 5.G.B.4	1	16
6	5.G.B.3, 5.G.B.4, MP.6	1	16
7A	5.G.B.3, 5.G.B.4	1	16
7B	5.G.B.3, 5.G.B.4	2	16
8	5.G.B.3, 5.G.B.4	2	16
9	5.G.B.3, 5.G.B.4	2	16
10	5.G.B.3, 5.G.B.4	1	15
11	5.G.B.3, 5.G.B.4	2	16
12	5.G.B.3, 5.G.B.4	1	15

The Topic Assessment Masters assess the same content item for item as the Topic Assessment in the Student's Edition.