MP4c-Ratios and Proportional Relationships

Content Area:MathCourse(s):Math 6 ACCTime Period:Marking Period 4Length:Weeks 9-11 Go Math! Advanced Unit 9Status:Published

Essential Questions

- How can you use rates and proportionality to solve real world problems?
- How can you use proportional relationships and percentages to solve real-world problems?

Big Ideas

• Analyze proportional relationships and use them to solve real-world and mathematical problems.

Technology Connection

• 8.1.8.DA.1: Organize and transform data collected using computational tools to make it usable for a specific purpose.

Enduring Understandings

7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.

7.RP.2 Recognize and represent proportional relationships between quantities.

7.RP.2a Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

7.RP.3 Use proportional relationships to solve multistep ratio and percent problems.

Mathematical Practices Focus

- 1. Make sense of problems and persevere in solving them. Lesson 21.3
- 2. Reason abstractly and quantitatively. Lesson 20.1, 20.2, 20.3, 21.1, 21.2
- 3. Construct viable arguments and critique the reasoning of others. Lesson 20.2, 20.3, 21.1, 21.3
- 4. Model with mathematics. Lesson 20.1, 20.2, 20.3, 21.1, 21.2, 21.3
- 5. Use appropriate tools strategically. Lesson 20.1, 21.2
- 6. Attend to precision. Lesson 20.3, 21.2
- 7. Look for and make use of structure. Lesson 20.1, 20.2, 20.3, 21.1, 21.2, 21.3
- 8. Look for and express regularity in repeated reasoning. Lesson 20.1, 20.2, 20.3, 21.2, 21.3