

# Unit 2a-Analyze and Solve Percent Problems

Content Area: **Math**  
Course(s): **Math 7 PRE-ALGEBRA**  
Time Period: **Marking Period 2**  
Length: **WK1-4 Envision Mathematics Topic 4**  
Status: **Published**

## Essential Questions

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- How can percents show proportional relationships between quantities and be used to solve problems?

## Big Ideas

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- Identify percent, represent and solve proportional relationships with percent equations and using proportions.
- Understand percent change and percent error.

## CSDT Technology Connection

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

## Enduring Understandings

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### Ratios and Proportional Relationships

7.RP.2c Represent proportional relationships by equations. For example, if total cost  $t$  is proportional to the number  $n$  of items purchased at a constant price  $p$ , the relationship between the total cost and the number of items can be expressed as  $t = pn$ .

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

## Mathematical Practices Focus

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1. Make sense of problems and persevere in solving them. Lesson 1,2,3,4,5,6, page 169

2. Reason abstractly and quantitatively. Lesson 1,2,3,5,6, page 169
3. Construct viable arguments and critique the reasoning of others. Lesson 1,2,3,4,6, page 169
4. Model with mathematics. Lesson 3,4,5, page 169
5. Use appropriate tools strategically. Page 169
6. Attend to precision. Lesson 3,4 page 169
7. Look for and make use of structure. Lesson 1,2,3,4,5, page 169
8. Look for and express regularity in repeated reasoning. Lesson 5, page 169