

Unit Topic Ratios and Proportional Relationships

Standards M07.A-R.1.1

Unit Essential Question

Lesson 1 Focus

Unit Rates

Standards

M07.A-R.1.1.1; M07.A-R.1.1.3

Students Will Know... (Key Vocabulary)

unit rate, proportional, constant of proportionality

Students Will Be Able To...

1. Determine unit rates from a proportional graph. 2. Determine unit rates from a table. 3. Determine unit rates from an equation. 4. Determine unit rates from a verbal description. 5. Identify the constant of proportionality (unit rate) from each of the above situations.

Lesson Essential Question 1

What is a unit rate and how are they computed?

Lesson 2 Focus

Proportional Relationships

Standards

M07.A-R.1.1.2; M07.A-R.1.1.4; M07.A-R.1.1.5

Students Will Know... (Key Vocabulary)

proportional, equivalent ratios

Students Will Be Able To...

1. Determine proportional relationships by testing for equivalent ratios in a table. 2. Determine proportional relationships by graphing on a coordinate plane and observing whether the graph is a straight line through the origin.

Lesson Essential Question 2

How can you determine whether two quantities are proportionally related?

Lesson 3 Focus

Percents

Standards

M07.A-R.1.1.6

Students Will Know... (Key Vocabulary)

Interest, Principal, Markup, Markdown, Gratuities, Commission, Percent Increase, and Decrease

Students Will Be Able To...

Use proportional relationships to solve problems involving:
1. Interest 2. Tax 3. Markups and Markdowns 4. Tips and commissions 5. Percent Increase and Decrease

Lesson Essential Question 3

How are proportional relationships used to solve percent problems?

Lesson 4 Focus

Ratios and Proportions

Standards

M07.A-R.1.1.4; M07.A-R.1.1.6

Students Will Know... (Key Vocabulary)

Ratios, Proportions

Students Will Be Able To...

1. Use words to set up ratios and proportions. 2. Solve proportions.

Lesson Essential Question 4

What is the best way to set up ratios and proportions?

Lesson 5 Focus

Standards

Students Will Know... (Key Vocabulary)

Students Will Be Able To...

Lesson Essential Question 5

Major Unit Assignment Test

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