

Unit Rates Worksheet Answer Key PDF

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Part 1: Building a Foundation

What is a unit rate?

undefined. A) A comparison of two different quantities

undefined. B) A rate that compares a quantity to one unit of another quantity ✓

undefined. C) A measure of speed

undefined. D) A type of graph

A unit rate is a rate that compares a quantity to one unit of another quantity.

Which of the following are examples of unit rates? (Select all that apply)

undefined. A) 50 miles per hour ✓

undefined. B) 3 apples

undefined. C) \$5 per item ✓

undefined. D) 10 liters

Examples of unit rates include rates that express a quantity per one unit of another quantity.

Explain why unit rates are useful in everyday life.

Unit rates help us compare prices, speeds, and other quantities in a standardized way.

List two operations involved in calculating a unit rate.

1. Operation 1

Division

2. Operation 2

Multiplication

Calculating a unit rate typically involves division and sometimes multiplication.

What operation is primarily used to calculate a unit rate?

undefined. A) Addition

undefined. B) Subtraction

undefined. C) Multiplication

undefined. D) Division ✓

Division is the primary operation used to calculate a unit rate.

Part 2: Comprehension and Application

If a car travels 180 miles in 3 hours, what is the unit rate in miles per hour?

undefined. A) 30 miles per hour

undefined. B) 60 miles per hour ✓

undefined. C) 90 miles per hour

undefined. D) 180 miles per hour

The unit rate is calculated by dividing 180 miles by 3 hours, resulting in 60 miles per hour.

Which of the following scenarios involve calculating a unit rate? (Select all that apply)

undefined. A) Determining the cost per pound of fruit ✓

undefined. B) Measuring the height of a building

undefined. C) Calculating the speed of a runner ✓

undefined. D) Counting the number of students in a class

Scenarios that involve calculating a unit rate include those that compare quantities to one unit.

Describe how you would find the unit rate for the price of apples if 10 apples cost \$15.

To find the unit rate, divide the total cost by the number of apples to find the cost per apple.

You buy 8 gallons of milk for \$24. What is the cost per gallon?

undefined. A) \$2

undefined. B) \$3 ✓

undefined. C) \$4

undefined. D) \$5

The cost per gallon is calculated by dividing \$24 by 8 gallons, resulting in \$3 per gallon.

A car travels 300 miles using 10 gallons of fuel. Calculate the fuel efficiency in miles per gallon.

To calculate fuel efficiency, divide 300 miles by 10 gallons, resulting in 30 miles per gallon.

Part 3: Analysis, Evaluation, and Creation

Which of the following best describes the relationship between unit rates and ratios?

undefined. A) Unit rates are a type of ratio ✓

undefined. B) Ratios are a type of unit rate

undefined. C) They are unrelated

undefined. D) Unit rates are always larger than ratios

Unit rates are a type of ratio that compares a quantity to one unit of another quantity.

Analyze the following scenarios and identify which involve unit rates. (Select all that apply)

undefined. A) Comparing the price of two different brands of cereal ✓

undefined. B) Measuring the length of a table

undefined. C) Calculating the cost per mile for a taxi ride ✓

undefined. D) Determining the number of pages in a book

Scenarios that involve unit rates include those that compare quantities to one unit.

Explain how converting units can affect the calculation of a unit rate.

Converting units can change the values being compared, thus affecting the unit rate calculation.

If two stores offer different unit rates for the same product, what should you consider to determine the better buy?

undefined. A) The total cost

undefined. B) The unit rate ✓

undefined. C) The brand name

undefined. D) The location of the store

To determine the better buy, consider the unit rate as it reflects the cost per unit.

Evaluate the following unit rates and select the best option for buying apples. (Select all that apply)

undefined. A) \$1.50 per apple ✓

undefined. B) \$6 for 4 apples ✓

undefined. C) \$7 for 5 apples

undefined. D) \$10 for 8 apples

The best option will have the lowest cost per apple when evaluated.

Create a real-world problem involving unit rates and provide a solution.

A real-world problem could involve comparing prices or speeds, and the solution should demonstrate the calculation of a unit rate.

List two factors that might influence your decision when choosing between two different unit rates for a product.

1. Factor 1

Quality

2. Factor 2

Brand

Factors may include quality, brand, total cost, and personal preferences.