

Grade 6 · Unit Rates · Worksheet

Common Core 6.RP.A.2, 6.RP.A.3b · mathovore.fr

Name: _____ Date: ____/____/____ Score: _____

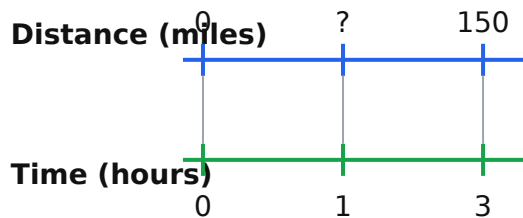
These 20 problems practice finding and using unit rates from standards 6.RP.A.2 and 6.RP.A.3b. You will find unit prices and speeds, work with fraction rates, then use a unit rate to solve for a total cost, a distance, or a time.

The last problems compare prices and paces, plan a recipe and a road trip, and combine two speeds. Write each answer with its rate unit.

Grade 6 Common Core: 6.RP.A.2 · 6.RP.A.3b

Problem 1: Unit rate of speed

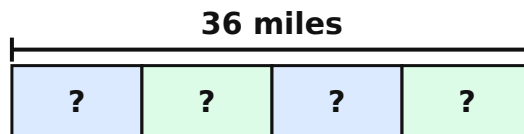
A car drives 150 miles in 3 hours at a constant speed. Find the unit rate in miles per hour.



Find the miles driven in 1 hour.

Problem 2: Bike ride speed

Diego rides his bike 36 miles in 4 hours at a steady pace. Find the unit rate in miles per hour.



Tape diagram: 36 miles in 4 hours.

Problem 3: Unit price

Six notebooks cost \$9.00 at the school store. Find the price of one notebook.

**School store**

6 notebooks

\$9.00

Price tag for 6 notebooks.

Problem 4: Water bottle price

A case of 8 water bottles costs \$6.00 at the corner store. Find the price of one bottle.

Problem 5: Typing rate

Jamal types 180 words in 4 minutes. Find the number of words he types per minute.

Problem 6: Filling a tank

A hose fills 15 gallons of water in 6 minutes. Find the unit rate in gallons per minute.

Problem 7: Cost from a unit price

Apples cost \$1.80 per pound at the farmers market. Find the cost of 5 pounds of apples.

Problem 8: Hiking with fractions

Noah hikes $\frac{3}{4}$ mile in $\frac{1}{2}$ hour. Find his unit rate in miles per hour.

Problem 9: Cheese by the pound

Cheddar cheese costs \$6.40 per pound at the deli. (a) Find the cost of 3.5 pounds. (b) Find how many pounds Priya can buy with \$32.

Problem 10: Printer speed

A school printer prints 12 pages per minute. (a) How many pages does it print in 8 minutes? (b) How many minutes does it take to print 150 pages?

Problem 11: Better buy: juice

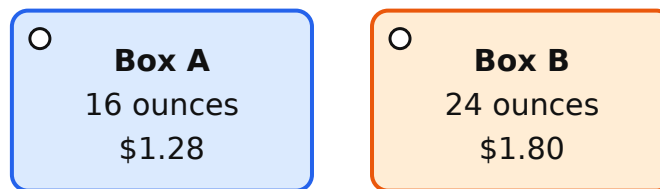
A 4-pack of juice bottles costs \$5.20. A 6-pack of the same juice costs \$7.50. Find each price per bottle and tell which pack is the better buy.

Pack	Bottles	Price
A	4	\$5.20
B	6	\$7.50

Two juice packs.

Problem 12: Pasta better buy

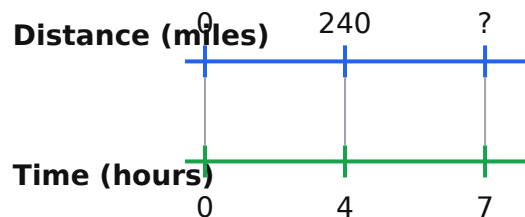
Pasta comes in a 16-ounce box for \$1.28 and a 24-ounce box for \$1.80. Find the price per ounce of each box and tell which is the better buy.



Two boxes of pasta.

Problem 13: Constant speed train

A train travels 240 miles in 4 hours at a constant speed. (a) How far does it travel in 7 hours? (b) How long does it take to travel 360 miles?



Constant speed: 240 miles in 4 hours.

Problem 14: Car wash earnings

The soccer team washes 8 cars and earns \$96. Find the amount earned per car. Then find how much the team earns for 5 cars at the same rate.

Problem 15: Babysitting pay

Mei earns \$63 for 7 hours of babysitting. At the same rate, (a) how much does she earn in 12 hours? (b) how many hours must she work to earn \$144?

Problem 16: Cookie recipe

A recipe uses 3 cups of flour to make 24 cookies. Aisha wants to bake 40 cookies with the same recipe. Find the unit rate in cups of flour per cookie, and then the cups of flour she needs.

Problem 17: Comparing three sizes

A cereal comes in three sizes: 12 ounces for \$2.40, 20 ounces for \$3.80, and 32 ounces for \$6.40. Find the unit price of each size and tell which size is the best buy.

Size	Ounces	Price
Small	12	\$2.40
Medium	20	\$3.80
Large	32	\$6.40

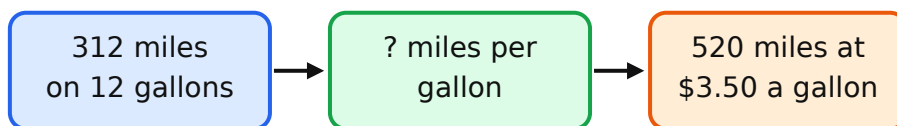
Cereal sizes and prices.

Problem 18: Runners compared

Maya runs 5 miles in 40 minutes. Ethan runs 3 miles in 27 minutes. Both keep a constant pace. Find each runner's time per mile and tell who is faster. Then find how many minutes faster per mile that runner is.

Problem 19: Gas and miles

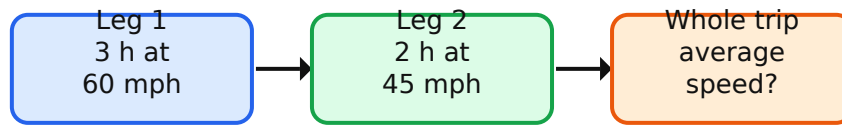
Liam's family drives 312 miles on 12 gallons of gas. Gas costs \$3.50 per gallon. (a) Find the miles per gallon. (b) Find the gallons needed for a 520-mile trip at the same rate. (c) Find the cost of that gas.



Plan: rate first, then gallons, then cost.

Problem 20: Road trip

Sofia drives for 3 hours at 60 miles per hour, then for 2 hours at 45 miles per hour. Find (a) the total distance, (b) the total time, and (c) her average speed for the whole trip.



Two legs of a road trip.