

Grade 6 · Unit Rates · Worksheet Answer Key

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

This answer key shows a full worked solution for each of the 10 unit rates problems. Each solution divides to find the unit rate and then checks the result by multiplying. Compare your steps and your rate units with the bold final answers.

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

Problem 1: Unit rate of speed

Divide miles by hours: $150 \div 3 = 50$.

Check: $50 \times 3 = 150$.

50 miles per hour.

Problem 2: Unit price

Divide the cost by the number of notebooks: $\$9.00 \div 6 = \$1.50$.

Check: $6 \times 1.50 = 9.00$.

\$1.50 per notebook.

Problem 3: Typing rate

Divide words by minutes: $180 \div 4 = 45$.

Check: $45 \times 4 = 180$.

45 words per minute.

Problem 4: Filling a tank

Divide gallons by minutes: $15 \div 6 = 2.5$.

Check: $2.5 \times 6 = 15$.

2.5 gallons per minute.

Problem 5: Cost from a unit price

Multiply the unit price by the number of pounds: $1.80 \times 5 = 9.00$.

\$9.00.

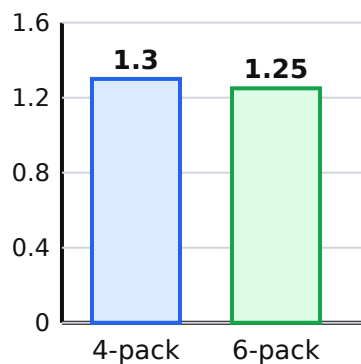
Problem 6: Better buy: juice

4-pack: $\$5.20 \div 4 = \$1.30$ per bottle.

6-pack: $\$7.50 \div 6 = \$1.25$ per bottle.

The 6-pack has the lower price per bottle.

The 6-pack is the better buy (\$1.25 versus \$1.30).



Price per bottle: the 6-pack is lower.

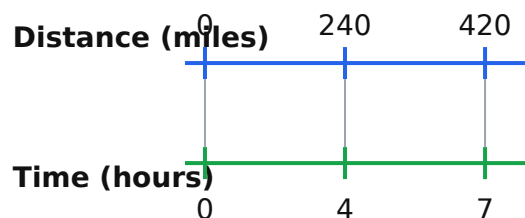
Problem 7: Constant speed train

Unit rate: $240 \div 4 = 60$ miles per hour.

(a) $60 \times 7 = 420$ miles.

(b) $360 \div 60 = 6$ hours.

(a) 420 miles. (b) 6 hours.



At 60 miles per hour, 7 hours is 420 miles.

Problem 8: Babysitting pay

Unit rate: $\$63 \div 7 = \$9$ per hour.

(a) $9 \times 12 = 108$.

(b) $144 \div 9 = 16$.

(a) \$108. (b) 16 hours.

Problem 9: Comparing three sizes

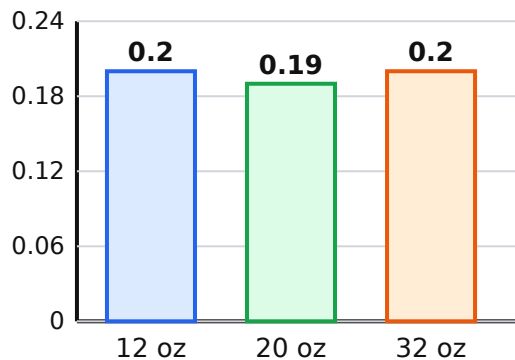
12 oz: $\$2.40 \div 12 = \$0.20$ per ounce.

20 oz: $\$3.80 \div 20 = \$0.19$ per ounce.

32 oz: $\$6.40 \div 32 = \$0.20$ per ounce.

The lowest unit price is \$0.19.

The 20-ounce size is the best buy.



Price per ounce: the 20-ounce size is lowest.

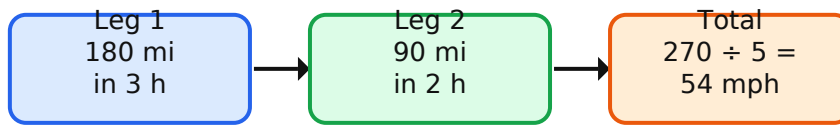
Problem 10: Road trip

(a) First part: $60 \times 3 = 180$ miles. Second part: $45 \times 2 = 90$ miles. Total: $180 + 90 = 270$ miles.

(b) Total time: $3 + 2 = 5$ hours.

(c) Average speed: $270 \div 5 = 54$ miles per hour.

(a) 270 miles. (b) 5 hours. (c) 54 miles per hour.



270 miles in 5 hours gives 54 miles per hour.