

Grade 6 · Unit Rates · Test Answer Key

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

This answer key gives worked solutions and a scoring guide for every question on the Grade 6 unit rates test. Points are given for the correct operation, accurate computation, and a final answer with the proper rate unit.

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

Question 1: Reading rate (2 points)

(a) $45 \div 90 = 0.5$ page per minute.

(b) $90 \div 45 = 2$ minutes per page.

(a) 0.5 page per minute. (b) 2 minutes per page.

Scoring: 1 point for each correct unit rate with its unit. Award 0 points if the division is reversed.

Question 2: Grape prices (2 points)

(a) $\$9.75 \div 5 = \$1.95$ per pound.

(b) $1.95 \times 8 = 15.60$.

(a) \$1.95 per pound. (b) \$15.60.

Scoring: 1 point for each part. Accept follow-through on part (b) if part (a) is wrong but used correctly.

Question 3: Highway speed (2 points)

(a) $210 \div 3.5 = 60$ miles per hour.

(b) $60 \times 5 = 300$ miles.

(a) 60 miles per hour. (b) 300 miles.

Scoring: 1 point for each part. Accept follow-through on part (b).

Question 4: Best buy: snacks (3 points)

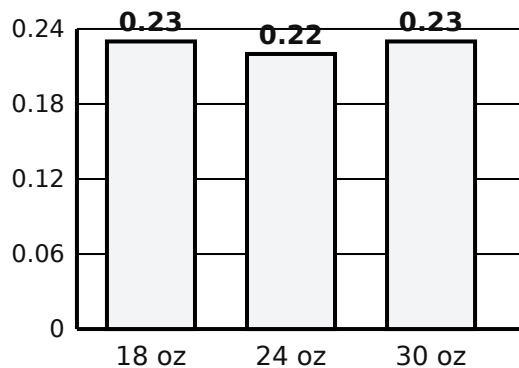
18 oz: $\$4.14 \div 18 = \$0.23$ per ounce.

24 oz: $\$5.28 \div 24 = \$0.22$ per ounce.

30 oz: $\$6.90 \div 30 = \$0.23$ per ounce.

The 24-ounce size has the lowest unit price (\$0.22 per ounce).

Scoring: 1 point for a correct method (dividing price by ounces), 1 point for all three unit prices correct, 1 point for naming the 24-ounce size.



Price per ounce of each size.

Question 5: Typing speeds (3 points)

Ethan: $150 \div 5 = 30$ words per minute.

Aisha: $222 \div 6 = 37$ words per minute.

Difference: $37 - 30 = 7$.

Aisha types faster, by 7 words per minute.

Scoring: 1 point for Ethan's rate, 1 point for Aisha's rate, 1 point for the correct conclusion with the difference of 7.

Question 6: Hourly pay (3 points)

(a) $13 \times 10 = 130$, so he earns \$130.

(b) $195 \div 13 = 15$ hours.

(c) $26 \div 2 = 13$, so \$26 for 2 hours is also \$13 per hour. The unit rate is the same, so both are equivalent rates.

(a) \$130. (b) 15 hours. (c) Both give \$13 per hour.

Scoring: 1 point for each part. In (c), the explanation must show that $26 \div 2 = 13$, or that doubling both 13 and 1 gives 26 and 2.

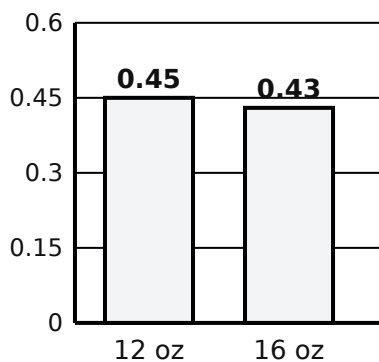
Question 7: Honey jars (3 points)

(a) 12-ounce jar: $\$5.40 \div 12 = \$0.45$ per ounce. 16-ounce jar: $\$6.88 \div 16 = \$0.43$ per ounce.

(b) The 16-ounce jar is the better buy. $0.43 \times 48 = 20.64$.

(a) \$0.45 and \$0.43 per ounce. (b) \$20.64.

Scoring: (a) 1 point for each correct unit price. (b) 1 point for \$20.64, using the lower unit price.



Price per ounce of each jar.

Question 8: Gas mileage (2 points)

(a) $288 \div 9 = 32$ miles per gallon.

(b) $400 \div 32 = 12.5$ gallons.

(a) 32 miles per gallon. (b) 12.5 gallons.

Scoring: 1 point for each part. Accept follow-through on part (b).

Total
20 points