GED Mathematical Reasoning Practice

Use this key to check answers and read the explanations.

1. A 6-roll package costs $9.30. What is the cost per roll?
   A. $1.55
   B. $1.45
   C. $1.65
   D. $2.15
   Correct answer: A. $1.55
   Divide $9.30 by 6 rolls to get $1.55 per roll.

2. A worker puts 15% of a $680 paycheck into savings. How much goes into savings?
   A. $85
   B. $68
   C. $102
   D. $117
   Correct answer: C. $102
   Multiply $680 by 0.15. The result is $102.

3. A freezer starts at −4 °C. Its temperature decreases by 6 °C, then increases by 3 °C. What is the final temperature?
   A. −1 °C
   B. −7 °C
   C. 5 °C
   D. −13 °C
   Correct answer: B. −7 °C
   After the decrease the temperature is −10 °C. The increase of 3 °C raises it to −7 °C.

4. A rectangular garden is 14 feet long and 9 feet wide. How many feet of edging are needed to go once around it?
   A. 37 feet
   B. 23 feet
   C. 126 feet
   D. 46 feet
   Correct answer: D. 46 feet
   The perimeter is 2(14 + 9) = 46 feet.

5. A tool rental costs a fixed $14 fee plus $9 per hour. Which expression gives the total charge in dollars for h hours?

A. 23h
B. 14 + 9h
C. 9 + 14h
D. 14h − 9

Correct answer: B. 14 + 9h
The fixed fee is charged once. The hourly part is $9 multiplied by the hour count.

6. A warehouse has 96 cartons. Three-eighths of the cartons are ready for pickup. How many are ready?

A. 36
B. 12
C. 24
D. 60

Correct answer: A. 36
One-eighth is 96 ÷ 8 = 12. Three-eighths is 3 × 12 = 36.

7. A repair shop logs five wait times of 22, 31, 14, 26, and 18 minutes. What is the median wait?

A. 24 minutes
B. 26 minutes
C. 18 minutes
D. 22 minutes

Correct answer: D. 22 minutes
The sorted times are 14, 18, 22, 26, and 31. The third value is the median.

8. On a plan, 1 inch represents 8 feet. A corridor measures 3.25 inches on the plan. How long is the actual corridor?

A. 28 feet
B. 24 feet
C. 26 feet
D. 32 feet

Correct answer: C. 26 feet
Multiply the plan length, 3.25 inches, by 8 feet per inch to get 26 feet.

9. A delivery costs $38. That includes a fixed $8 charge and $2.50 per box. How many boxes were delivered?

A. 12
B. 10
C. 14
D. 15

Correct answer: A. 12
Subtract the fixed fee to leave $30 in box charges. Divide $30 by $2.50 per box to get 12.

10. A rectangular storage container is 3 feet long, 2 feet wide, and 18 inches tall. What is the volume in cubic feet?

A. 108 cubic feet
B. 18 cubic feet
C. 6 cubic feet
D. 9 cubic feet

Correct answer: D. 9 cubic feet
Eighteen inches is 1.5 feet. Multiply the three dimensions in feet to get $3 \times 2 \times 1.5 = 9$ cubic feet.

11. A $120 chair is discounted by 25%. Then an 8% sales tax is charged on the discounted price. What is the total?

A. $90.00
B. $99.60
C. $97.20
D. $93.60

Correct answer: C. $97.20
The discounted price is $90. The tax is 8% of $90, or $7.20, for a total of $97.20.

12. A class has a $215 supply budget. Delivery costs $17 and each kit is $14. What is the greatest number of kits the class can buy within budget?

A. 13
B. 14
C. 15
D. 16

Correct answer: B. 14
After delivery there is $198 left. Fourteen kits cost $196, while 15 kits cost $210 before delivery.

13. One crew repaired 8 lamps with an average repair time of 25 minutes. Another crew repaired 12 lamps with an average of 35 minutes. What was the average for all 20 repairs?

A. 33 minutes
B. 30 minutes
C. 28 minutes
D. 31 minutes

Correct answer: D. 31 minutes
The crews used 8 × 25 + 12 × 35 = 620 minutes in total. Divide by 20 repairs to get 31 minutes.

14. Job A pays $35 plus $16 for each hour worked. Job B pays $59 plus $12 per hour. At what number of hours do the two jobs pay the same amount?

A. 6 hours
B. 4 hours
C. 8 hours
D. 12 hours

Correct answer: A. 6 hours
Solve 35 + 16h = 59 + 12h. Subtracting 12h and 35 gives 4h = 24, so h = 6.

15. A 9-foot by 13-foot room has a 2-foot by 4-foot platform that will remain uncovered. A package covers 11 square feet. What is the least number of whole packages that cover the rest of the room?

A. 11
B. 9
C. 10
D. 12

Correct answer: C. 10
The area to cover is 117 − 8 = 109 square feet. Nine packages cover 99 square feet, so a tenth package is needed.