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1. To find the average number of points per game a player scores, use the formula Points Per Game $=\frac{\text { TotalPoints }}{\text { Games }}$. Find the number of games a player has played if she has scored a total of 221 points and is averaging 17 points per game
2. Joan drives 333.5 miles before she has to buy gas. Her car gets 29 miles per gallon. How many gallons of gas did the car start out with?
3. Stan is purchasing sub-flooring for a kitchen he is remodeling. The area of the floor is $180 \mathrm{ft}^{2}$ and the width of the kitchen is 12 ft . What is the length of the sub-floor?
4. A room with width $w$, length $l$, and height $h$ with four walls needs to be painted.
a. Write a formula for the area that needs to be painted not accounting for doors or windows.
b. $\quad$ Rewrite the formula to find $h$ in terms of $A, l$, and $w$.
c. If $l$ is $18 \mathrm{ft}, w$ is 14 ft and $A$ is $512 \mathrm{ft}^{2}$, what is the height of the room?
5. Shirley is going to have the exterior of her home painted. Tim's Painting charges $\$ 250$ plus $\$ 14$ per hour. Colorful Paints charges $\$ 22$ per hour. How many hours would the job need to take for Tim's Painting to be the better deal?
6. Tracey is looking at two different travel agencies to plan her vacation. ABC Travel offers a plane ticket for $\$ 295$ and a rental car for $\$ 39$ per day. $\mathrm{M} \& \mathrm{~N}$ Travel offers a plane ticket for $\$ 350$ and a rental car for $\$ 33$ per day. What is the minimum number of days that Shirley's vacation should be for $\mathrm{M} \& \mathrm{~N}$ Travel to have the better deal?
7. Three times the sum of a number and 4 is 8 less than one-half the number. Write and solve an equation to find the number.
8. A square and a rectangle have the same perimeters. The length of a side of the square is $4 x-1$. The length of the rectangle is $2 x+1$ and the width is $x+2$. Write and solve an equation to find $x$.
9. A movie club charges a one-time membership fee of $\$ 25$ which allows members to purchase movies for $\$ 7$ each. Another club does not charge a membership fee and sells movies for $\$ 12$ each. How many movies must a member purchase for the cost of the two clubs to be equal?
10. General admission tickets to the fair cost $\$ 3.50$ per person. Ride passes cost an additional $\$ 5.50$ per person. Parking costs $\$ 6$ for the family. The total costs for ride passes and parking was $\$ 51$. How many people in the family attended the fair?
11. The sum of three integers is 228 . The second integer is 1 more than the first, and the third integer is 2 more than the first. Write an equation to determine the integers. Solve your equation. Show your work.
12. The builder measures the perimeter of the foundation to be 425 ft . He must order steel beams to install around the perimeter of the foundation. Steel must be ordered in meters. How many meters of steel should the builder order?
13. Mrs. Jacobsen purchased a 5-pound package of ground beef for $\$ 12.40$. She decided to use 8 ounces each day for dinner recipes. What was the cost of ground beef per meal?
14. Car 1 drove 408 miles in 6 hours and Car 2 drove 365 miles in 5 hours during the cross-country road race. Who had the fastest average speed?
15. The windows on a building are proportional to the size of the building. The height of each window is 18 in ., and the width is 11 in . If the height of the building is 108 ft , what is the width of the building?
16. Eric is planning to bake approximately 305 cookies. If 3 pounds of cookie dough make 96 cookies, how many pounds of cookie dough should he make?
17. On a map, the distance between Sheila's house and Shardae's house is 6.75 inches. According to the scale, 1.5 inches represents 5 miles. How far apart are the houses?
18. Sixty-two students, out of 100 surveyed, chose pizza as their favorite lunch item. If the school has 1250 students, how many students would likely say that pizza is their favorite if the survey is a fair representation of the student body?
19. The senior class is taking a trip to an amusement park. They received a special deal where for every 3 tickets they purchased they received one free ticket. 3 tickets cost $\$ 53.25$. The total purchase of tickets cost $\$ 1384.50$. How many tickets did they receive?
20. Sammy is constructing a model bridge out of sticks. The actual bridge is 1320 ft long. He wants the scale of his bridge to be $1: 400$. How long should the model be?
21. If you deposit $\$ 800$ in a savings account that earns simple interest at a rate of $1.5 \%$ per year, how much interest will you have earned after 5 years?
22. When Marty was born, his parents deposited $\$ 5000$ in a college savings account that earns simple interest at a rate of $7.25 \%$ per year. How much interest will the money have earned after 18 years?
23. You have $\$ 10,000$ to deposit in a savings account that earns simple interest at a rate of $4.5 \%$ per year. How much interest will be in the account after 2 years?
