

Algebra I

4.5 Warm-Up #5

Solving Problems with Percents

NAME: _____

DATE: _____ HOUR: _____

Read each question and circle the best answer.

- | | |
|--|--|
| <p>1. What percent of 36 is 27?</p> <p>A 7%</p> <p>B 7.5%</p> <p>C 70%</p> <p>D 75%</p>
<p>2. What percent of 40 is 24?</p> <p>F 6%</p> <p>G 50%</p> <p>H 60%</p> <p>I 66%</p>
<p>3. Darius ate 15 out of 20 grapes. What percent of the grapes did he eat?</p> <p>A 7.5%</p> <p>B 70%</p> <p>C 75%</p> <p>D 80%</p> | <p>4. $n\%$ of 45 is 27; n is—</p> <p>F 45</p> <p>G 50</p> <p>H 60</p> <p>I 66</p>
<p>5. Angie answered 32 of 40 questions correctly. What percent of the answers did she get correct?</p> <p>A 80%</p> <p>B 85%</p> <p>C 88%</p> <p>D 90%</p>
<p>6. What percent of 80 is 20?</p> <p>F 2.5%</p> <p>G 4%</p> <p>H 25%</p> <p>I 40%</p> |
|--|--|

Solve each problem.

7. Gene went to the mall with \$60. He spent \$12 playing games. What percent did Gene spend? _____
8. What percent of 75 is 30? _____
9. Four out of five people watch television for more than one hour each day. What percent of 5 is 4? _____
10. There are 45 cookies on a plate; 36 of the cookies are chocolate chip. What percent of the cookies are chocolate chip? _____
11. Jamal is saving his money to buy his mother a new bracelet. He has saved \$90 of the \$150 he needs. What percent has he saved? _____
12. This morning the bagel shop sold 180 of the bagel of the day; 99 of the bagels were sold with cream cheese. What percent of the bagel of the day were sold with cream cheese? _____
13. Beth sold a color enlargement in a wooden frame for \$150. Sales tax is 8%. How much was the sales tax? _____
14. Lu makes \$8.75 an hour. He is getting a 20% raise. How much will his raise be per hour? _____

Read each question and circle the best answer.

1. 30% of what number is 3?

- A 9
- B 10
- C 90
- D 100

2. 32% of what number is 8?

- F 4
- G 8
- H 25
- I 256

3. Angel knows that 60% of a number is 90. What is the number?

- A 150
- B 300
- C 600
- D 666

4. I am thinking of a number. Two percent of the number is 16. What is the number?

- F 8
- G 80
- H 160
- I 800

Solve each problem.

5. Cleo the cat had kittens. Forty percent, or 2, of the kittens were female. How many kittens did Cleo have? _____

6. 80% of what number is 64? _____

7. When Coach Hamilton played 50% of his team, there were 11 players on the field. How many players does Coach Hamilton have on his team? _____

8. Arthur ate 12 pieces of candy. This was 25% of the package. How many pieces of candy were in the package? _____

9. The city police were using radar in the school zone this morning. Most of the tickets they wrote were for drivers going 40%, or 10 mph, over the speed limit. What is the speed limit in the school zone? _____ mph

10. 53% of what number is 106? _____

11. 38% of what number is 19? _____

12. During the summer, a room at the beach is 28%, or \$28, more expensive than during the fall. How much is a room at the beach during the fall? _____

13. 12% of $n = 72$; $n =$ _____

14. 46% of $n = 115$; $n =$ _____

15. 38% of $n = 209$; $n =$ _____

16. 7% of $n = 63$; $n =$ _____

17. 44% of $n = 11$; $n =$ _____

18. 25% of $n = 74$; $n =$ _____

19. Ellen plans to finance her new car. The dealer offers an annual interest rate of 9.9%. The bank offers an annual interest rate of $9\frac{3}{4}\%$. Which is the lower interest rate? _____

20. Juan won 26 of 40 games in a tennis tournament. What percent of the games did he win? _____