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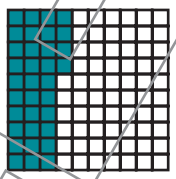
Fractions, Decimals, and Percents

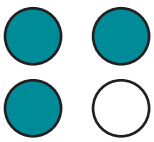
The word *percent* means "hundredths." A percent is another way to write a fraction or a decimal.
Write the fraction, equivalent fraction with a denominator of 100, decimal, and percent for the shaded part of each figure.

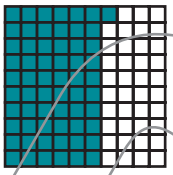
S 

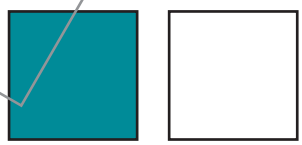
$\frac{4}{5}$, $\frac{80}{100}$, 0.80, 80%

1. 

2. 

3. 

4. 

5. 

Write each decimal as a fraction and as a percent.

S 0.16 = $\frac{16}{100}$ = 16%

6. 0.6 = _____
7. 0.85 = _____
8. 0.24 = _____
9. 0.09 = _____
10. 0.2 = _____
11. 0.32 = _____
12. 0.05 = _____
13. 0.61 = _____
14. 0.78 = _____

Write each percent as a decimal and as a fraction.

S 72% = 0.72 = $\frac{72}{100}$

15. 49% = _____
16. 6% = _____
17. 18% = _____
18. 80% = _____
19. 3% = _____

More Fractions, Decimals, and Percents

Write each decimal as a fraction and as a percent.

S 0.234 = $\frac{234}{1{,}000} = \frac{23.4}{100} = 23.4\%$

1. 0.087 = _____

2. 0.625 = _____

3. 0.404 = _____

Write each percent as a decimal and as a fraction.

S 32.5% = $0.325 = \frac{325}{1{,}000}$

4. 81.9% = _____

5. 7.4% = _____

6. 27.6% = _____

7. 4.5% = _____

8. 19.8% = _____

Divide to change each fraction to a percent.

S $\frac{3}{8} = 8\overline{)3.000} = 37.5\%$

$$\begin{array}{r} 0.375 \\ 8\overline{)3.000} \\ \underline{24} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

9. $\frac{4}{25}$ =

10. $\frac{7}{20}$ =

S $\frac{2}{3} = 3\overline{)2.00} = 66\frac{2}{3}\%$

$$\begin{array}{r} 0.66\frac{2}{3} \\ 3\overline{)2.00} \\ \underline{18} \\ 20 \\ \underline{18} \\ 2 \end{array}$$

11. $\frac{1}{3}$ =

12. $\frac{5}{6}$ =

Find the answer to each word problem.

13. One-sixth of the people on a bus got off at the first stop. What percent of the people got off at the first stop?

14. In a survey of 1,000 people, 672 people answered yes. What is this number as a percent?

Finding a Percent of a Number

To find a percent of a number, change the percent to a decimal and multiply.
Change each percent to a decimal. Then solve.

S What is 6% of $750?

6% of $750 = n

6% = 0.06

0.06 × $750 = $45

1. 32% of 285 = n

2. 56% of $400 = n

3. 84% of $160 = n

4. 9% of 250 = n

5. 43% of 86 = n

6. 8% of $1.59 = n

7. 21% of 1,025 = n

8. 98% of 800 = n

To find a percent of a number, change the percent to a fraction and multiply.
Change each percent to a fraction. Then solve.

S 75% of 80 =

$$75\% = \frac{75}{100} = \frac{3}{4}$$

$$\frac{3}{\cancel{4}_{1}} \times \frac{\cancel{80}^{20}}{1} = \frac{60}{1} = 60$$

9. 20% of 550 = n

10. 50% of $124 = n

11. $66\frac{2}{3}\%$ of 12 = n

12. 25% of 700 = n

13. 12.5% of 72 = n

Problem Solving: Finding a Percent of a Number

Find the answer to each word problem.

1. A nature organization has 84 members. If 50% of them show up for a meeting, how many members are at the meeting?

2. Pilar scored on 48% of the shots she took in a basketball game. If she took 25 shots, on how many did she score?

3. A used car dealer makes a profit of 23% on each car he sells. How much profit does he make on a car that sells for $8,500?

4. Ms. Perez made a 20% down payment on a house. How much was the down payment if the house cost $125,000?

5. Arlo bought a graphic novel for $9.00. If he paid 7% sales tax on the price, how much tax did he pay?

6. In Parksburg, 4,700 people voted in an election. Of the voters, 74% voted for Mr. Calzone. How many people voted for him?

7. Jenna saves $33\frac{1}{3}\%$ of her pay from her part-time job. This week she earned $42.60. How much did she save?

8. There are 40 swimmers at a meet. If 15% win medals, how many swimmers win medals?