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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

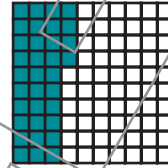


$\frac{4}{5}, \frac{80}{100}, 0.80, 80\%$

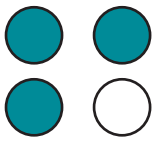
1.



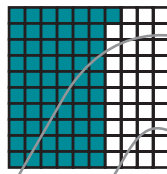
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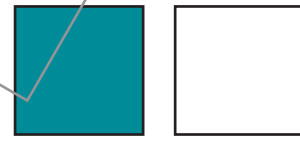
3.



4.



5.



Write each decimal as a fraction and as a percent.

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

10. 0.2 = \_\_\_\_\_

6. 0.6 = \_\_\_\_\_

11. 0.32 = \_\_\_\_\_

7. 0.85 = \_\_\_\_\_

12. 0.05 = \_\_\_\_\_

8. 0.24 = \_\_\_\_\_

13. 0.61 = \_\_\_\_\_

9. 0.09 = \_\_\_\_\_

14. 0.78 = \_\_\_\_\_

Write each percent as a decimal and as a fraction.

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

17. 18% = \_\_\_\_\_

15. 49% = \_\_\_\_\_

18. 80% = \_\_\_\_\_

16. 6% = \_\_\_\_\_

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

$$\begin{array}{r} 0.375 \\ 8 \overline{) 3.000} \\ \underline{24} \phantom{00} \\ 60 \phantom{0} \\ \underline{56} \phantom{0} \\ 40 \phantom{0} \\ \underline{40} \phantom{0} \\ 0 \phantom{0} \end{array}$$

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

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

S  $\frac{2}{3} = 3 \overline{) 0.66\frac{2}{3}} = 66\frac{2}{3}\%$

$$\begin{array}{r} 0.66\frac{2}{3} \\ 3 \overline{) 2.00} \\ \underline{18} \phantom{00} \\ 20 \phantom{0} \\ \underline{18} \phantom{0} \\ 2 \phantom{0} \end{array}$$

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?

$$6\% \text{ of } \$750 = n$$

$$6\% = 0.06$$

$$0.06 \times \$750 = \$45$$

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 =

$$75\% = \frac{75}{100} = \frac{3}{4}$$
$$\frac{3}{4} \times \frac{80}{1} = \frac{60}{1} = 60$$

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?