



SKILL 11: Fractions, Decimals, Percent

Fractions, decimals, and percents all describe parts of a whole.

- To convert a fraction to a percent, write an equal fraction with a denominator of 100. You might want to use a proportion to do this.
- To convert a decimal to a percent, multiply the decimal by 100 and write the percent symbol. Remember, to multiply by 100, you can simply move the decimal point two places to the right.

Example 1

Write 15% as a fraction in simplest form and as a decimal.

$$\text{Fraction: } 15\% = \frac{15}{100} = \frac{15 \div 5}{100 \div 5} = \frac{3}{20} \quad \text{Decimal: } 15\% = \frac{15}{100} = 0.15$$

Example 2

Write $\frac{1}{6}$ as a percent. Round to the nearest tenth.

Write a proportion using $\frac{1}{6}$ and a fraction with a denominator of 100.

$$\frac{1}{6} = \frac{x}{100}$$

Find the cross products.

$$6x = 100$$

Divide both sides by 6.

$$x = 100 \div 6$$

$$x \approx 16.7$$

$6x$ means 6 times x
Recall that the symbol \approx means *is approximately equal to*.

$$\text{So, } \frac{1}{6} \approx 16.7\%$$

Guided Practice

Write each percent as a fraction in simplest form and as a decimal.

1. $67\% = \frac{67}{100}$ _____; _____

2. $8\% = \frac{8}{100}$ _____; _____

Write each decimal as a percent.

3. $0.6 = 0.60 =$ _____

4. $0.59 =$ _____

5. $0.231 =$ _____

Solve each proportion. Then write the percent.

6. $\frac{7}{10} = \frac{x}{100}$

7. $\frac{5}{8} = \frac{x}{100}$

8. $\frac{2}{3} = \frac{x}{100}$

$x =$ _____

$x =$ _____

$x \approx$ _____

$\frac{7}{10} =$ _____

$\frac{5}{8} =$ _____

$\frac{2}{3} \approx$ _____

SKILL 11: Practice

Convert each percent to a fraction in lowest terms and to a decimal.

1. 80%

Fraction: _____

Decimal: _____

2. 25%

Fraction: _____

Decimal: _____

3. 3%

Fraction: _____

Decimal: _____

4. 75%

Fraction: _____

Decimal: _____

5. 16%

Fraction: _____

Decimal: _____

6. 94%

Fraction: _____

Decimal: _____

Convert each fraction or decimal to a percent. Round to the nearest tenth of a percent if necessary.

7. $\frac{3}{10}$ _____8. $\frac{37}{50}$ _____9. $\frac{18}{20}$ _____10. $\frac{1}{2}$ _____11. $\frac{4}{5}$ _____12. $\frac{93}{100}$ _____

13. 0.43 _____

14. 0.01 _____

15. 0.74 _____

16. $\frac{4}{9}$ _____17. $\frac{1}{8}$ _____18. $\frac{23.5}{100}$ _____

The table at the right shows what part of her allowance each girl saves.

19. Who saves the greatest percent of her allowance? _____

20. Who saves the smallest percent of her allowance? _____

21. Which girls save the same percent? _____

Savings Rate

Lindy	$\frac{1}{5}$
Sonia	16%
Annie	0.25
Gena	20%
Mari	$\frac{1}{10}$

TEST PREP

22. Write 0.347 as a percent.

A 34.7%

C 3.47%

B 347%

D 0.00347%

Skill 11

23. Which shows a unit rate?

F $\frac{1 \text{ ride}}{\$10}$ H $\frac{\$10}{\$1}$ G $\frac{10 \text{ rides}}{\$1}$ J $\frac{10 \text{ rides}}{\$10}$

Skill 3