

Name _____ Date _____

Percents and Fractions (pages 330–333)

A **percent** is a ratio that compares a number to 100.

Expressing a Percent as a Fraction	To write a percent as a fraction, follow these steps. <ul style="list-style-type: none"> Express the percent as a fraction with a denominator of 100. Simplify the fraction.
Expressing a Fraction as a Percent	To write a fraction as a percent, follow these steps. <ul style="list-style-type: none"> Set up a proportion with the fraction as one ratio and $\frac{x}{100}$ as the other. Find the cross products and divide to solve for x. The fraction is equal to x percent.

EXAMPLES

A Express 75% as a fraction in simplest form.

75% is $\frac{75}{100}$.

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

$75\% = \frac{3}{4}$ *Divide numerator and denominator by the common factor of 25.*

B Express the fraction $\frac{14}{25}$ as a percent.

$\frac{14}{25} = \frac{x}{100}$ *Write a proportion.*

$1,400 = 25x$ *Find the cross products.*

$\frac{1,400}{25} = x$ *Divide to solve for x.*

$56 = x$, so $\frac{14}{25} = 56\%$

Try These Together

- Express the fraction $\frac{13}{20}$ as a percent. *HINT: Write a proportion and solve for x.*
- Express 120% as a fraction in simplest form. *HINT: Begin with the fraction $\frac{120}{100}$.*

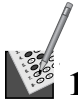
PRACTICE

Express each percent as a fraction in simplest form.

- 25%
- 10%
- 30%
- 45%
- 60%
- 95%
- 16%
- 58%

Express each fraction as a percent.

- $\frac{1}{2}$
- $\frac{8}{5}$
- $\frac{3}{4}$
- $\frac{44}{100}$
- $\frac{12}{20}$
- $\frac{36}{40}$
- $\frac{8}{40}$
- $\frac{7}{5}$



19. Standardized Test Practice What is 24% expressed as a fraction in simplest form?

- A** $\frac{18}{75}$ **B** $\frac{12}{50}$ **C** $\frac{24}{100}$ **D** $\frac{6}{25}$

Answers: 1. 65% 2. $1\frac{5}{1}$ 3. $\frac{4}{1}$ 4. $\frac{10}{1}$ 5. $\frac{10}{3}$ 6. $\frac{20}{9}$ 7. $\frac{5}{3}$ 8. $\frac{20}{19}$ 9. $\frac{25}{4}$ 10. $\frac{50}{29}$ 11. 50% 12. 160% 13. 75% 14. 44% 15. 60% 16. 90% 17. 20% 18. 140% 19. D

