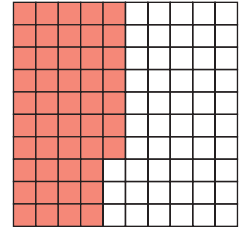


Writing Fractions, Decimals, and Percents

A **percent** is a part-to-whole ratio where the whole is 100. The symbol for percent is %.

In the model, 47 of the 100 squares are shaded. You can write the shaded part of the model as a fraction, a decimal, or a percent.



Fraction: forty-seven out of one hundred, or $\frac{47}{100}$

Decimal: forty-seven hundredths, or 0.47

Percent: forty-seven percent, or 47%

Example 1 Write the percent or decimal as a fraction.

a. $86\% = \frac{86}{100} = \frac{43}{50}$

b. $125\% = \frac{125}{100} = \frac{5}{4}$, or $1\frac{1}{4}$

c. $0.2 = \frac{2}{10} = \frac{1}{5}$

Example 2 Write the percent or fraction as a decimal.

a. $19\% = 19\cdot = 0.19$

b. $\frac{3}{8} = 3 \div 8 = 0.375$

c. $\frac{3}{20} = \frac{3 \cdot 5}{20 \cdot 5} = \frac{15}{100} = 0.15$

Example 3 Write the decimal or fraction as a percent.

a. $0.34 = 0.34 = 34\%$

b. $0.915 = 0.915 = 91.5\%$

c. $\frac{3}{2} = \frac{3 \cdot 50}{2 \cdot 50} = \frac{150}{100} = 150\%$

Practice

Check your answers at BigIdeasMath.com.

Write the percent or decimal as a fraction.

1. 0.7

2. 0.08

3. 0.79

4. 1.75

5. 0.125

6. 0.744

7. 25%

8. 38%

9. 96%

10. 1%

11. 225%

12. 0.5%

Write the percent or fraction as a decimal.

13. $\frac{3}{4}$

14. $\frac{5}{8}$

15. $\frac{11}{50}$

16. $\frac{17}{25}$

17. $\frac{31}{20}$

18. $\frac{101}{200}$

19. 10%

20. 27%

21. 65%

22. 100%

23. 0.8%

24. 350%

Write the decimal or fraction as a percent.

25. 0.35

26. 0.91

27. 0.5

28. 1.4

29. 0.02

30. 0.006

31. $\frac{3}{25}$

32. $\frac{17}{20}$

33. $\frac{7}{8}$

34. $\frac{1}{16}$

35. $\frac{11}{2}$

36. $\frac{23}{40}$

37. Which is greater, $\frac{5}{6}$ or 83%?

38. Which is greater, 11.1% or $0.\bar{1}$?