

Do Now

Write the percent as a fraction or mixed number in simplest form.

1. 16%

2. 40%

3. 68%

4. 85%

5. 148%

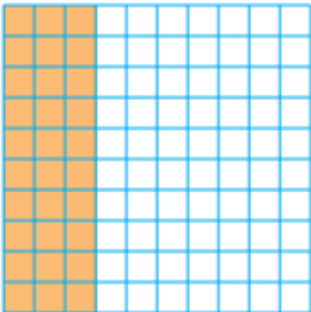
6. 150%

7. 105%

8. 276%

write the percent as a decimal.

a.



$$\square \% = \frac{\square}{\square}$$

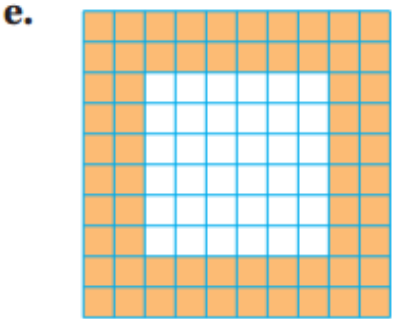
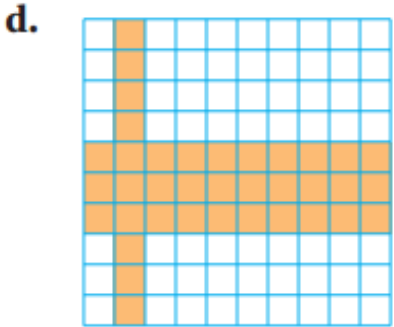
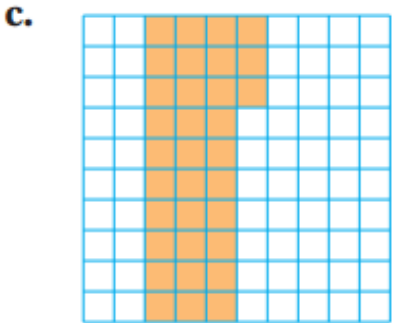
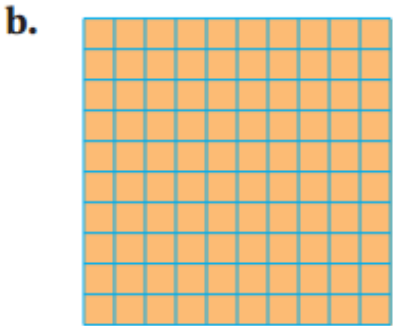
Annotations: A blue box with an arrow points to the top numerator square. A green box with an arrow points to the fraction bar. A red box with an arrow points to the bottom denominator square.

$$= \frac{\square}{\square}$$

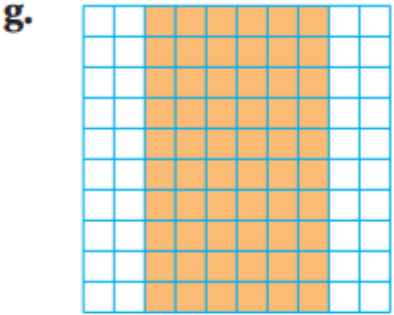
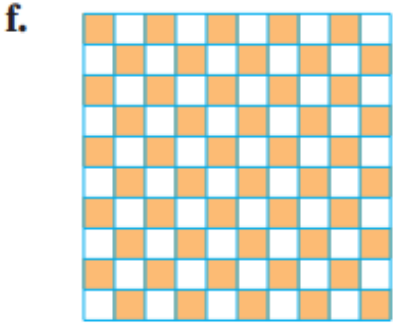
Simplify.

$$= \square$$

Write fraction as a decimal.



5.
5.



 **Key Idea****Writing Percents as Decimals**

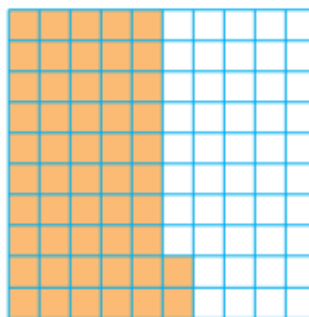
Words Remove the percent symbol. Then divide by 100, or just move the decimal point two places to the left.

Numbers $23\% = \underbrace{23.}_{\text{move decimal two places left}}\% = 0.23$

a. Write 52% as a decimal.

$$52\% = 52.\% = 0.52$$

Check



b. Write 7% as a decimal.

$$7\% = \underbrace{07.}_{\text{red}}\% = 0.07$$

 **On Your Own**

Write the percent as a decimal. Use a model to check your answer.

1. 24%

2. 3%

3. 107%

4. 92.7%

 **Key Idea****Writing Decimals as Percents**

Words Multiply by 100, or just move the decimal point two places to the right. Then add a percent symbol.

Numbers $0.36 = 0.\underline{36} = 36\%$

2 Writing Decimals as Percents

a. Write 0.47 as a percent.

$$0.47 = 0.\underline{47} = 47\%$$

b. Write 0.663 as a percent.

$$0.663 = 0.\underline{663} = 66.3\%$$

c. Write 1.8 as a percent.

$$1.8 = 1.\underline{80} = 180\%$$

d. Write 0.009 as a percent.

$$0.009 = 0.\underline{009} = 0.9\%$$

 **On Your Own**

Write the decimal as a percent. Use a model to check your answer.

5. 0.94

6. 1.2

7. 0.316

8. 0.005

EXAMPLE 4 Real-Life Application

The figure shows the portions of ultraviolet (UV) rays reflected by four different surfaces. How many times more UV rays are reflected by water than by sea foam?



Write 25% and $\frac{21}{25}$ as decimals.

Sea foam: $25\% = \underbrace{25.}_{\text{red}}\% = 0.25$ **Water:** $\frac{21}{25} = \frac{84}{100} = 0.84$

Divide 0.84 by 0.25: $\underbrace{0.25}_{\text{red}} \overline{)0.84}_{\text{red}} \rightarrow \begin{array}{r} 3.36 \\ 25 \overline{)84.00} \end{array}$

••• So, water reflects about 3.4 times more UV rays than sea foam.

On Your Own!

Write the percent as a decimal.

- 1 7. 78%
10. 57.4%
13. 47.63%
16. 217%

Write the decimal as a percent.

- 2 19. 0.74
22. 0.768
25. 0.487
28. 5.12

Homework

Page 336 in the
workbook