Topic 16 Reteaching

Set A, pages 396–397

Write the ratio of squares to circles in three ways.

The ratio can be written as 4 to 5, 4:5, or $\frac{4}{5}$.

Write two ratios equal to 4:12.

Multiply or divide both terms by the same number.

$\frac{4 \times 2}{12 \times 2} = \frac{8}{24}$ $\frac{4 \div 2}{12 \div 2} = \frac{2}{6}$

4:12 = 8:24 = 2:6

Remember that the order of the terms is important.

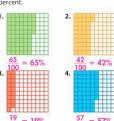Use the shapes at the left. Write each ratio.

1. triangles to circles **3 to 5**

2. all shapes to triangles **12 to 3**

3. circles to all shapes **5 to 12**

Write two other ratios equal to each ratio. **Sample answers are given.**

4. $\frac{9}{12}$ **$\frac{3}{4}$, $\frac{18}{24}$**

5. 6 to 7 **12 to 14; 18 to 21**

6. 14:28 **2:4; 1:2**

7. 27:9 **9:3; 3:1**

8. 15 to 12 **5 to 4; 30 to 24**

9. $\frac{35}{40}$ **$\frac{7}{8}$, $\frac{70}{80}$**

10. 5 to 3 **10 to 6; 15 to 9**

11. 18:24 **3:4; 36:48**

12. $\frac{21}{49}$ **$\frac{3}{7}$, $\frac{42}{98}$**

13. $\frac{15}{21}$ **$\frac{5}{7}$, $\frac{30}{42}$**

Set B, pages 398–399

Write the ratio that compares the shaded squares to all the squares.

The ratio can be written as 33 to 100, 33:100, or $\frac{33}{100}$.

Write that ratio as a percent.

$\frac{33}{100}$ = 33%

Remember that a percent is a ratio in which a number is compared to 100.

Write the ratio that compares the shaded squares to all the squares for each grid. Write each ratio as a percent.

1.

$\frac{65}{100}$ = 65%

2.

$\frac{42}{100}$ = 42%

3.

$\frac{19}{100}$ = 19%

4.

$\frac{57}{100}$ = 57%

Set C, pages 400–401

Write 24% as a decimal and as a fraction in simplest form.

24% means 24 out of 100.

To write a decimal: Write the ratio as a decimal in hundredths.

24% = 0.24

To write a fraction: Write as a ratio with 100 as the second term and find the simplest form.

$\frac{24}{100} = \frac{24 \div 4}{100 \div 4} = \frac{6}{25}$

Remember to write zeros when more decimal places are needed.

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

1. 50% **0.50; $\frac{1}{2}$**

2. 40% **0.40; $\frac{2}{5}$**

3. 25% **0.25; $\frac{1}{4}$**

4. 5% **0.05; $\frac{1}{20}$**

5. 36% **0.36; $\frac{9}{25}$**

6. 70% **0.70; $\frac{7}{10}$**

7. 94% **0.94; $\frac{47}{50}$**

8. 100% **1.00; 1**

Set D, pages 402–403

Find 40% of 80.

Change 40% to a decimal.   40% = 0.40 or 0.4

Multiply 80 by 0.4.

$\begin{array}{r} 80 \\ \times\ 0.4 \\ \hline 32.0 \end{array}$

40% of 80 is 32.

Remember that in order to find the percent of a number, multiply the number by the decimal form of the percent.

Find the percent of each number.

1. 75% of 56 **42**

2. 10% of 32 **3.2**

3. 50% of 36 **18**

4. 90% of 60 **54**

Set E, pages 404–405

A hockey player attempted 15 shots on goal and made 9 goals. What percent of the shots did she make?

Write the ratio in a table. Find equal ratios to get the second term to be 100. Write the percent.

	ratio	÷3	×4	×5
Goals made	9	3	12	60
Shots attempted	15	5	20	100

Remember that $\frac{60}{100}$ = 60%.

The hockey player made goals on 60% of her shots.

Remember that to find a ratio equal to another ratio, both terms of the ratio must be multiplied or divided by the same number.

Make a table to find each percent. **See margin for sample tables.**

1. A baseball player was up to bat 40 times and got 14 hits. What percent of the times at bat did he get a hit? **35%**

2. The weather report stated that rain fell on 9 of the 30 days last month. On what percent of the days last month did it rain? **30%**

Set E

1.

Hits	14	7	35
Times at bat	40	20	100

2.

Rainy days	9	3	30
Total days	30	10	100