

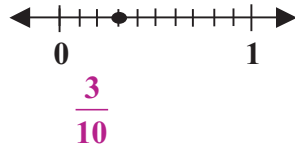
Independent Practice

4.1

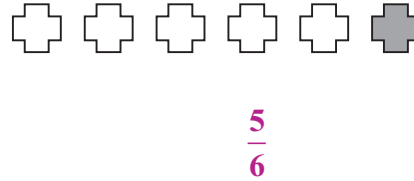
NAME _____

Module 4 Fractions, Decimals, Percents, and Factors
Lesson 1 Concepts of Fractions, Ratios, and Percents

1. What fraction does the point on the number line represent?



2. Name the fraction of the crosses that is white.



3. Locate the benchmark fraction $\frac{3}{4}$ on the number line.

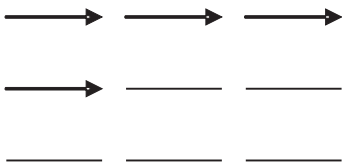


4. Name the fraction shown by the shaded region.



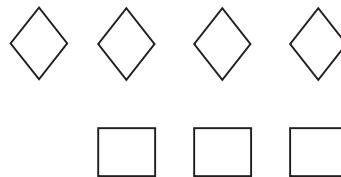
Express each ratio in three ways.

5. What is the ratio of segments with arrows to the entire group of segments?



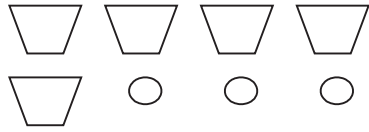
$4:9$ $4 \text{ to } 9$ $\frac{4}{9}$

6. What is the ratio of rectangles to the entire group of shapes?



$3:7$ $3 \text{ to } 7$ $\frac{3}{7}$

7. What is the ratio of ovals to trapezoids?



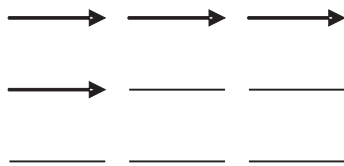
3:5 3 to 5 $\frac{3}{5}$

8. What is the ratio of white stars to shaded stars?



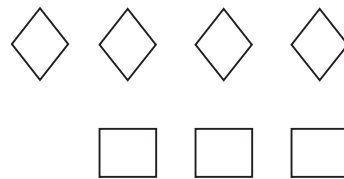
1:3 1 to 3 $\frac{1}{3}$

9. What is the ratio of segments with arrows to the segments without arrows?



4:5 4 to 5 $\frac{4}{5}$

10. What is the ratio of rectangles to diamonds?



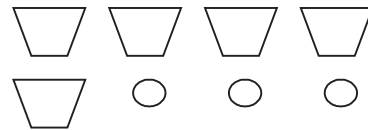
3:4 3 to 4 $\frac{3}{4}$

11. What is the ratio of white stars to the entire group of stars?



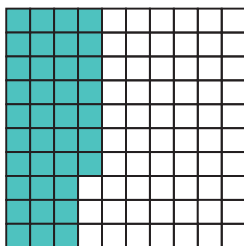
1:4 1 to 4 $\frac{1}{4}$

12. What is the ratio of ovals to the entire group of shapes?



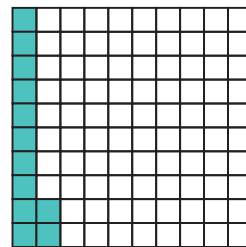
3:8 3 to 8 $\frac{3}{8}$

13. What fraction of the model is shaded?



$\frac{37}{100}$

14. What fraction of the model is shaded?



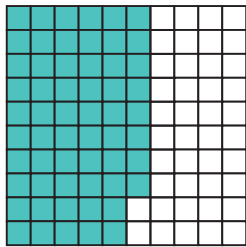
$\frac{12}{100}$

NAME _____

Module 4 **Fractions, Decimals, Percents, and Factors**
Lesson 1 **Concepts of Fractions, Ratios, and Percents**

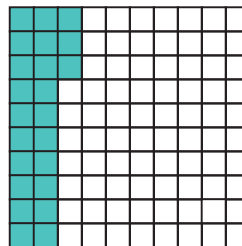
Write the fraction of the model that is shaded, the ratio of shaded squares to total squares, and the percent of squares that is shaded.

15.



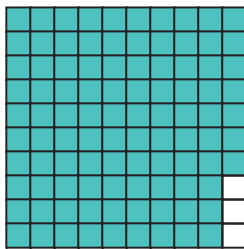
$\frac{58}{100}$ 58:100 58%

16.



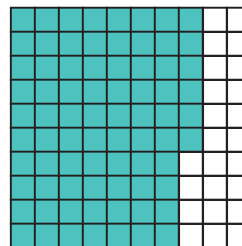
$\frac{23}{100}$ 23:100 23%

17.



$\frac{97}{100}$ 97:100 97%

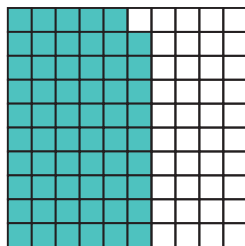
18.



$\frac{76}{100}$ 76:100 76%

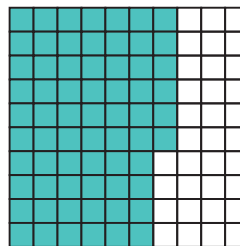
Write the ratio of shaded squares to total squares, the ratio of white squares to total squares, the ratio of shaded squares to white squares, and the ratio of white squares to shaded squares.

19.



59:100 41:100 59:41 41:59

20.



66:100 34:100 66:34 34:66

Journal

1. Which is greater, a proper fraction or an improper fraction? Explain.
2. Is a part-to-whole ratio a proper fraction or an improper fraction? Explain.
3. Is a part-to-part ratio a proper fraction or an improper fraction? Explain.

Cumulative Review

Find the absolute value.

1. $|56|$
56

Order the list of numbers from least to greatest.

2. 6, -4, 1, 3, -3, 8
-4, -3, 1, 3, 6, 8

Evaluate the expressions.

3. $-7 + (-7)$
-14

4. $12 + (-4)$
8

5. $-1 - (-18)$
17

6. $-3 - 12$
-15

7. -2×5
-10

8. -3×-9
27

Divide.

9. $-40 \div 10$
-4

10. $-28 \div -7$
4

NAME _____

Module 4 Fractions, Decimals, Percents, and Factors
Lesson 1 Concepts of Fractions, Ratios, and Percents

Solve each problem. Show all work.

- 11.** A hot-air balloon is tied somewhere above ground to a platform labeled zero. Distances above the platform are given as positive integers. Distances below the platform are given as negative integers. The hot air balloon is descending at a rate of four units per hour. Where was it three hours ago?

$$-4 \times (-3)$$

$$12$$

12 units above the platform

- 12.** A hot-air balloon is tied somewhere above ground to a platform labeled zero. The balloon descends at a rate of three units per hour for four hours, and then it ascends two units per hour for five hours. Where is it?

$$(-3) 4 + (2) 5$$

$$-12 + 10$$

$$-2$$

two units below the platform

Possible Journal Answers

1. An improper fraction is always greater than a proper fraction. An improper fraction is greater than or equal to one. A proper fraction is less than one.
2. A part-to-whole ratio is a proper fraction because a part is less than the whole.
3. A part-to-part ratio can be a proper fraction or an improper fraction. For example, if there are eight animals, three cats and five dogs, the ratio of cats to dogs is the proper fraction $\frac{3}{5}$. The ratio of dogs to cats is the improper fraction $\frac{5}{3}$.