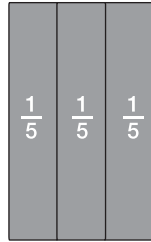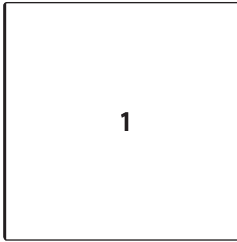Name _____

Use Fraction Squares to model each mixed number. Write a number sentence for the mixed number model. Write number sentences for the decimal and for the percent.
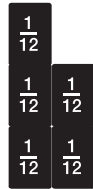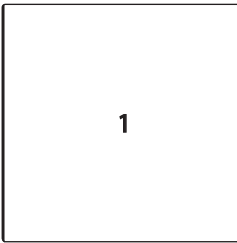
1.

1

| $\frac{1}{5}$ | $\frac{1}{5}$ | $\frac{1}{5}$ |

mixed number: _____

decimal: _____

percent: _____

Using Fraction Squares, model each number. Write number sentences for the mixed number, decimal, and percent.

2.
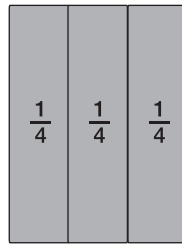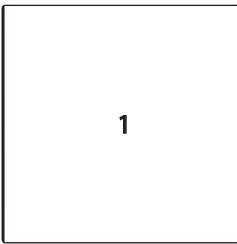
1

| $\frac{1}{12}$ |
| $\frac{1}{12}$ | $\frac{1}{12}$ |
| $\frac{1}{12}$ | $\frac{1}{12}$ |

mixed number: _____

decimal: _____

percent: _____

3.

1

| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |

mixed number: _____

decimal: _____

percent: _____

Write each mixed number as a decimal and as a percent.

4. $1\frac{1}{3}$

_____

_____

5. $1\frac{4}{5}$

_____

_____

6. $2\frac{1}{4}$

_____

_____

7. $1\frac{5}{6}$

_____

_____

8. $2\frac{2}{3}$

_____

_____

9. $1\frac{7}{8}$

_____

_____

Name _____

Challenge! Compare the mixed numbers in Questions 1, 2, and 3. Write the numbers as decimals from greatest to least. Explain how you compared the numbers.

_____

_____
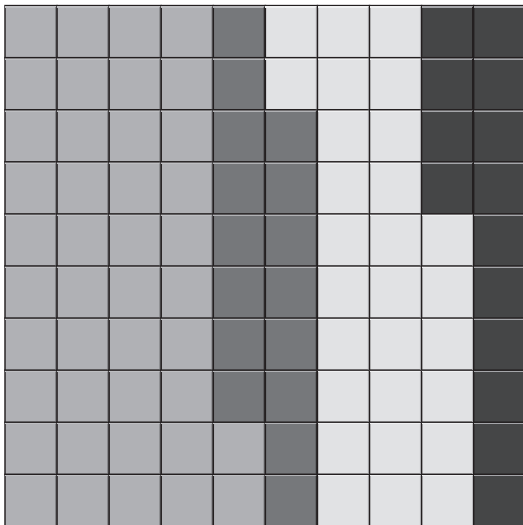
_____

_____

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_____

_____

_____

_____

_____

_____

Name _____

Use Color Tiles in a 10 × 10 array to model the fraction shown. Write the fraction for each color. Then write the decimal and percent for each color.

1.

_____

_____

_____

_____

Using Color Tiles, model a 10 × 10 array for the fractions given. Sketch the model. Write the decimal and percent for each color.

2.

Red: $\frac{35}{100}$ _____

Blue: $\frac{12}{100}$ _____

Yellow: $\frac{32}{100}$ _____

Green: $\frac{21}{100}$ _____

Write each fraction as a decimal and as a percent.

3. $\frac{18}{100}$

4. $\frac{33}{100}$

5. $\frac{72}{100}$

_____   _____   _____

6. $\frac{25}{100}$

7. $\frac{16}{100}$

8. $\frac{40}{100}$

_____   _____   _____

Name _____

Challenge!   Why can you use a 10 × 10 array to convert a part of a total to
a percent?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Name _____

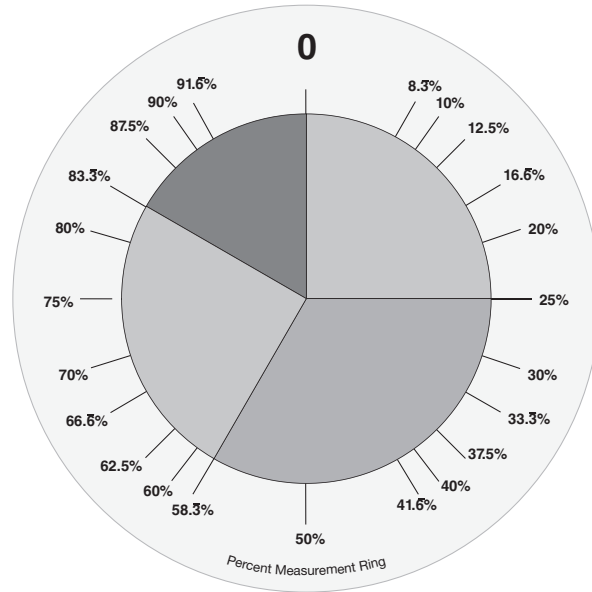**Use Fraction Circles and Fraction Circle Rings to model each percentage. Write the percent as a fraction.**

1. 25% _____

33.3̄% _____

25% _____

16.6̄% _____

0

91.6̄%
90%
87.5%
83.3̄%
80%
75%
70%
66.6̄%
62.5%
60%
58.3̄%
50%
41.6̄%
40%
37.5%
33.3̄%
30%
25%
20%
16.6̄%
12.5%
10%
8.3̄%

Percent Measurement Ring

Using Fraction Circles and Fraction Circle Rings, model each percentage. Sketch the model. Write the percent as a fraction.

2. 20% _____

12.5% _____

37.5% _____

30% _____

Write each percent as a fraction.

3. 80%

_____

4. 62.5%

_____

5. 16.6̄%

_____

6. 87.5%

_____

7. 41.6̄%

_____

8. 75%

_____

Name _____

Challenge!   What does the word *percent* mean? Explain how to get the
numerator and decimal of a fraction equivalent to a given percent.

_____

_____
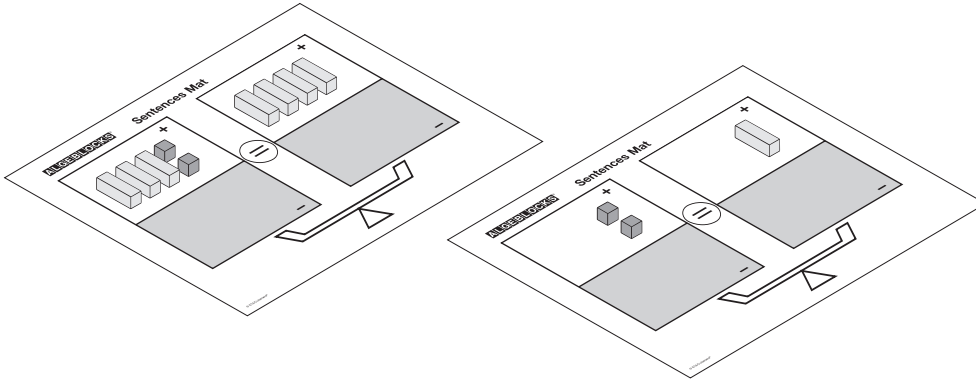
_____

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_____

_____

_____

Name _____

Use Algeblocks and an Algeblocks Sentences Mat to model the equation shown and then solve it. Write the equation and the solution.
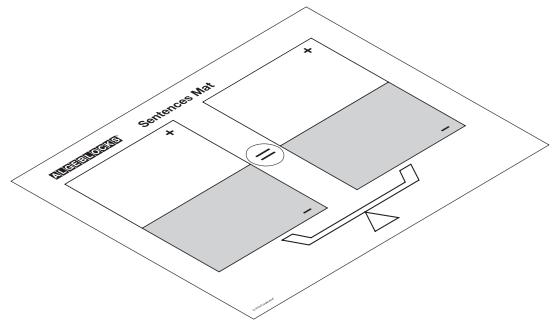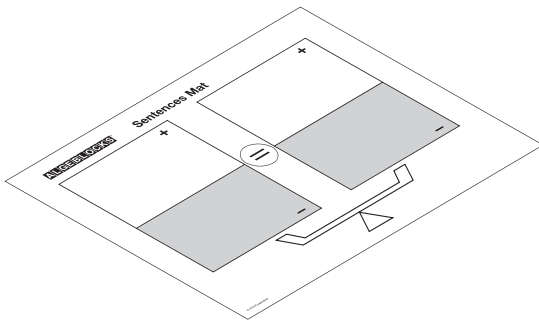
1.

_____   _____

Using Algeblocks and an Algeblocks Sentences Mat, model each equation. Sketch the model. Write each solution.

2. $3x + 9 = 4x$

3. $4x = 12 + 3x$

_____   _____

Find each solution.

4. $x + 1 = 2x$

_____

5. $4x = 1 + 3x$

_____

6. $6x + 5 = 7x$

_____

7. $x + 6 = 2x$

_____

8. $10x = 9x + 9$

_____

9. $8x + 8 = 7x$

_____

Name _____

Challenge!   When solving an equation, how do you get both the variable terms on the same side of the equal sign? Explain.

_____

_____

_____

_____
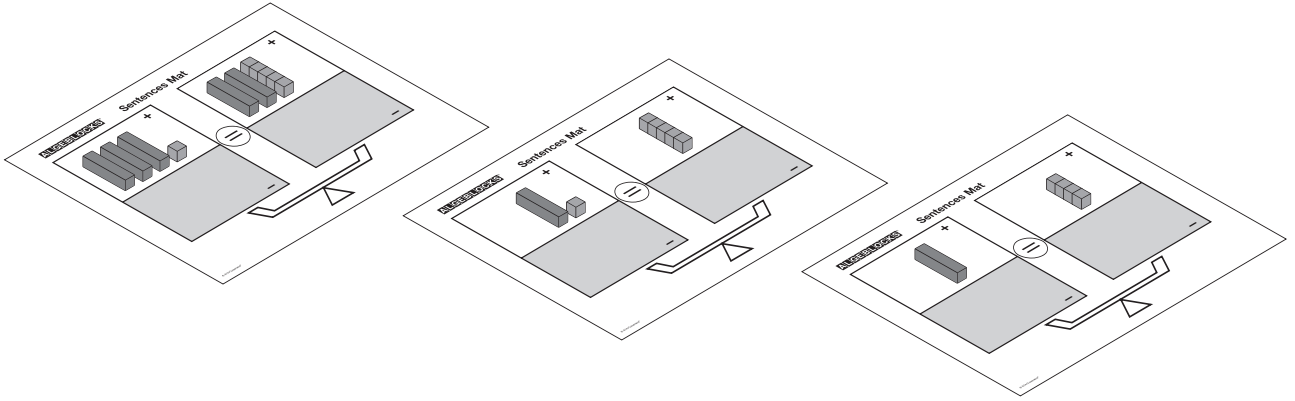
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_____

Name _____

Use Algeblocks and an Algeblocks Sentences Mat to model the equation shown. Write the equation. Write the equation after the first step and write the solution.
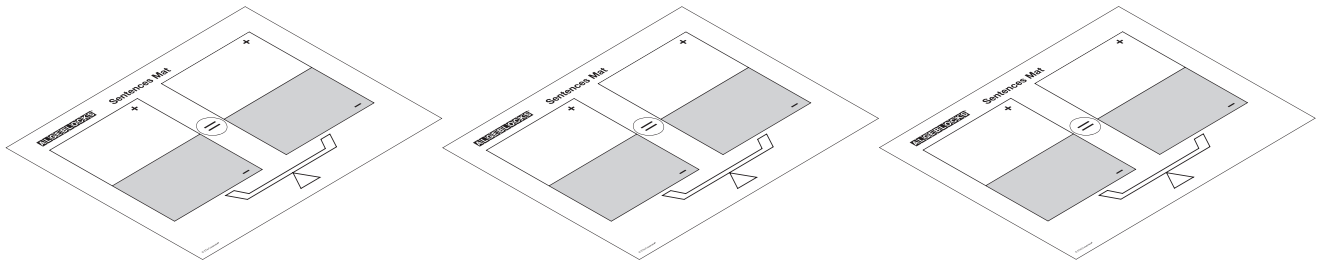
1.

_____   _____   _____

Using Algeblocks and an Algeblocks Sentences Mat, model the equation. Sketch the model, the first step, and the solution.

2. $2x + 9 = 13$

_____   _____   _____

Solve each equation.

3. $4x + 10 = 9x$

_____

4. $5x = 12 + x$

_____

5. $6y + 10 = 8y$

_____

6. $2x + 12 = 5x$

_____

7. $10y = 6y + 8$

_____

8. $4y + 3 = 7y$

_____

Name

Challenge! Describe the two steps you used to solve the equations on the previous page. Choose an equation, show the step, and explain the reason for each step.