



# *The Dominican*

COMMUNITY *of* SCHOOLS

May, 2023

Dear Parents/Guardians,

The attached math enrichment packet is meant to provide your child with a review of the skills he learned in Fifth Grade. Your child is expected to turn the completed packet in to me on the first day of the 2023-2024 school year. Please encourage your child to schedule time throughout the summer to work on the packet; do not wait until the end of summer to begin.

Reminders for your child:

- Read and follow all directions.
- Show work for ANY/ALL problems in an organized manner and number each problem to receive full credit.

Have a great summer!

Sincerely,

Coach Reeves

Name \_\_\_\_\_

## Place-Value Match

Match the standard form of the number given in Column A with either the word form or the expanded form of the number in Column B.

### Column A

1. 900,000
2. 8,000,000
3. 30,000,000
4. 2,000,000
5. 100,000
6. 5,000,000
7. 60,000,000
8. 7,000,000
9. 800,000
10. 300,000
11. 1,000,000
12. 50,000,000
13. 600,000,000
14. 3,000,000

### Column B

- thirty million
- $5 \times 1,000,000$
- six hundred million
- eight hundred thousand
- $9 \times 100,000$
- three million
- sixty million
- $2 \times 1,000,000$
- $5 \times 10,000,000$
- $3 \times 100,000$
- seven million
- one hundred thousand
- one million
- eight million

15. **Write Math** Explain the method you used to match the standard form of a number to either its word form or its expanded form.

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Name \_\_\_\_\_

## Algebra • Powers of 10 and Exponents

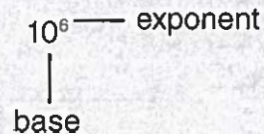
You can represent repeated factors with a base and an exponent.

Write  $10 \times 10 \times 10 \times 10 \times 10 \times 10$  in exponent form.

10 is the repeated factor, so 10 is the **base**.

The base is repeated 6 times, so 6 is the **exponent**.

$$10 \times 10 \times 10 \times 10 \times 10 \times 10 = 10^6$$



A base with an exponent can be written in words.

Write  $10^6$  in words.

The exponent 6 means “the sixth power.”

$10^6$  in words is “the sixth power of ten.”

You can read  $10^2$  in two ways: “ten squared” or “the second power of ten.”

You can also read  $10^3$  in two ways: “ten cubed” or “the third power of ten.”

Write in exponent form and in word form.

1.  $10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$

exponent form: \_\_\_\_\_ word form: \_\_\_\_\_

2.  $10 \times 10 \times 10$

exponent form: \_\_\_\_\_ word form: \_\_\_\_\_

3.  $10 \times 10 \times 10 \times 10 \times 10$

exponent form: \_\_\_\_\_ word form: \_\_\_\_\_

Find the value.

4.  $10^4$

5.  $2 \times 10^3$

6.  $6 \times 10^2$

\_\_\_\_\_

Name \_\_\_\_\_

## Divide by 1-Digit Divisors

You can use compatible numbers to help you place the first digit in the quotient. Then you can divide and check your answer.

**Divide.**  $4\overline{)757}$

**Step 1** Estimate with compatible numbers to decide where to place the first digit.

$$757 \div 4$$



$$800 \div 4 = 200$$

The first digit of the quotient is in the hundreds place.

**Step 2** Divide.

$$\begin{array}{r} 189 \text{ r}1 \\ 4\overline{)757} \\ \underline{-4} \phantom{0} \\ 35 \phantom{0} \\ \underline{-32} \phantom{0} \\ 37 \\ \underline{-36} \\ 1 \end{array}$$

**Step 3** Check your answer.

$$\begin{array}{r} 189 \leftarrow \text{quotient} \\ \times 4 \leftarrow \text{divisor} \\ \hline 756 \\ + 1 \leftarrow \text{remainder} \\ \hline 757 \leftarrow \text{dividend} \end{array}$$

Since 189 is close to the estimate of 200, the answer is reasonable.

So,  $757 \div 4$  is 189 r1.

**Divide. Check your answer.**

1.  $8\overline{)136}$

2.  $7\overline{)297}$

3.  $5\overline{)8,126}$

4.  $7\overline{)4,973}$

5.  $3\overline{)741}$

6.  $7\overline{)456}$

Name \_\_\_\_\_

## Divide by 2-Digit Divisors

When you divide by a 2-digit divisor, you can use estimation to help you place the first digit in the quotient. Then you can divide.

**Divide.**  $53 \overline{)2,369}$

**Step 1** Use compatible numbers to estimate the quotient. Then use the estimate to place the first digit in the quotient.

$$\begin{array}{r} 40 \\ 50 \overline{)2,000} \end{array}$$

The first digit will be in the tens place.

**Step 2** Divide the tens.

$$\begin{array}{r} 4 \\ 53 \overline{)2,369} \\ - 212 \\ \hline 24 \end{array}$$

**Think:**

**Divide:** 236 tens  $\div$  53

**Multiply:**  $53 \times 4$  tens = 212 tens

**Subtract:** 236 tens  $-$  212 tens

**Compare:**  $24 < 53$ , so the first digit of the quotient is reasonable.

**Step 3** Bring down the 9 ones. Then divide the ones.

$$\begin{array}{r} 44 \text{ r}37 \\ 53 \overline{)2,369} \\ - 212 \downarrow \\ \hline 249 \\ - 212 \\ \hline 37 \end{array}$$

**Think:**

**Divide:** 249 ones  $\div$  53

**Multiply:**  $53 \times 4$  ones = 212 ones

**Subtract:** 249 ones  $-$  212 ones

**Compare:**  $37 < 53$ , so the second digit of the quotient is reasonable.

So,  $2,369 \div 53$  is 44 r37.

Write the remainder to the right of the whole number part of the quotient.

**Divide. Check your answer.**

1.  $52 \overline{)612}$

2.  $63 \overline{)917}$

3.  $89 \overline{)1,597}$

4.  $43 \overline{)641}$

5.  $27 \overline{)4,684}$

6.  $64 \overline{)8,455}$

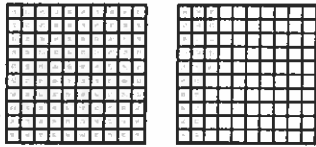
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## Decimal Addition

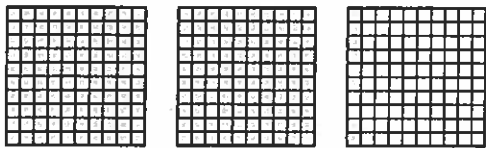
You can use decimal models to help you add decimals.

**Add.**  $1.25 + 0.85$

**Step 1** Shade squares to represent 1.25.



**Step 2** Shade additional squares to represent adding 0.85.



**Step 3** Count the total number of shaded squares.  
There are 2 whole squares and 10 one-hundredths squares shaded. So, 2.10 wholes in all are shaded.

So,  $1.25 + 0.85 = \underline{2.10}$ .

**Remember:**

Since there are only 75 squares left in the second model, you need to add another whole model for the remaining 10 squares.

**Add. Use decimal models. Draw a picture to show your work.**

1.  $2.1 + 0.59$

\_\_\_\_\_

2.  $1.4 + 0.22$

\_\_\_\_\_

3.  $1.27 + 1.15$

\_\_\_\_\_

4.  $0.81 + 0.43$

\_\_\_\_\_

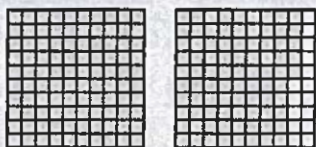
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## Decimal Subtraction

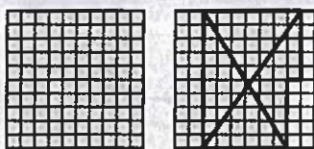
You can use decimal models to help you subtract decimals.

**Subtract.**  $1.85 - 0.65$

**Step 1** Shade squares to represent 1.85.



**Step 2** Circle and cross out 65 of the shaded squares to represent subtracting 0.65.



**Step 3** Count the shaded squares that are not crossed out. Altogether, 1 whole square and 20 one-hundredths squares, or 1.20 wholes, are NOT crossed out.

So,  $1.85 - 0.65 = \underline{1.20}$ .

**Remember:**

By circling and crossing out shaded squares, you can see how many squares are taken away, or subtracted.

**Subtract. Use decimal models. Draw a picture to show your work.**

1.  $1.4 - 0.61$

\_\_\_\_\_

2.  $1.6 - 1.08$

\_\_\_\_\_

3.  $0.84 - 0.17$

\_\_\_\_\_

4.  $1.39 - 1.14$

\_\_\_\_\_

Name \_\_\_\_\_

# Add Decimals

Add.  $4.17 + 9.8$

**Step 1** Estimate the sum.

$$\begin{array}{r}
 4.17 + 9.8 \\
 \downarrow \quad \downarrow \\
 \text{Estimate: } 4 + 10 = 14
 \end{array}$$

**Step 2** Line up the place values for each number in a place-value chart. Then add.

	Ones	Tenths	Hundredths	
	4	• 1	7	
+	9	• 8		
	13	• 9	7	← sum

**Step 3** Use your estimate to determine if your answer is reasonable.

**Think:** 13.97 is close to the estimate, 14. The answer is reasonable.

So,  $4.17 + 9.8 = \underline{13.97}$ .

**Estimate. Then find the sum.**

1. Estimate: \_\_\_\_\_

$$\begin{array}{r}
 1.20 \\
 + 0.34 \\
 \hline
 \end{array}$$

2. Estimate: \_\_\_\_\_

$$\begin{array}{r}
 1.52 \\
 + 1.21 \\
 \hline
 \end{array}$$

3. Estimate: \_\_\_\_\_

$$\begin{array}{r}
 12.25 \\
 + 11.25 \\
 \hline
 \end{array}$$

4. Estimate: \_\_\_\_\_

$$\begin{array}{r}
 10.75 \\
 + 1.11 \\
 \hline
 \end{array}$$

5. Estimate: \_\_\_\_\_

$$\begin{array}{r}
 22.65 \\
 + 18.01 \\
 \hline
 \end{array}$$

6. Estimate: \_\_\_\_\_

$$\begin{array}{r}
 34.41 \\
 + 15.37 \\
 \hline
 \end{array}$$



Name \_\_\_\_\_

## Multiplication with Decimals and Whole Numbers

To find the product of a one-digit whole number and a decimal, multiply as you would multiply whole numbers. To find the number of decimal places in the product, add the number of decimal places in the factors.

To multiply  $6 \times 4.25$ , multiply as you would multiply  $6 \times 425$ .

### Step 1

Multiply the ones.

$$\begin{array}{r} \phantom{0}^3 \\ 425 \\ \times 6 \\ \hline 0 \end{array}$$

### Step 2

Multiply the tens.

$$\begin{array}{r} \phantom{0}^{13} \\ 425 \\ \times 6 \\ \hline 50 \end{array}$$

### Step 3

Multiply the hundreds. Then place the decimal point in the product.

$$\begin{array}{r} \phantom{0}^{13} \\ 4.25 \leftarrow 2 \text{ decimal places} \\ \times 6 \leftarrow + 0 \text{ decimal places} \\ \hline 25.50 \leftarrow 2 \text{ decimal places} \end{array}$$

So,  $6 \times 4.25 = \underline{25.50}$ .

Place the decimal point in the product.

1.  $8.23$  **Think:** The place value of the decimal factor is hundredths.

$$\begin{array}{r} \phantom{0} \\ 8.23 \\ \times 6 \\ \hline 49.38 \end{array}$$

2.  $6.3$

$$\begin{array}{r} \phantom{0} \\ 6.3 \\ \times 4 \\ \hline 25.2 \end{array}$$

3.  $16.82$

$$\begin{array}{r} \phantom{0} \\ 16.82 \\ \times 5 \\ \hline 84.10 \end{array}$$

Find the product.

4.  $5.19$

$$\begin{array}{r} \phantom{0} \\ 5.19 \\ \times 3 \\ \hline \end{array}$$

5.  $7.2$

$$\begin{array}{r} \phantom{0} \\ 7.2 \\ \times 8 \\ \hline \end{array}$$

6.  $37.46$

$$\begin{array}{r} \phantom{0} \\ 37.46 \\ \times 7 \\ \hline \end{array}$$

Name \_\_\_\_\_

## Multiply Using Expanded Form

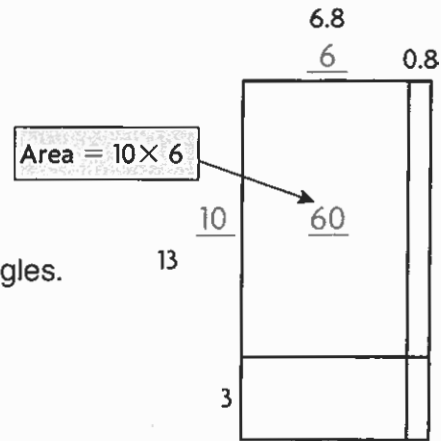
You can use a model and partial products to help you find the product of a two-digit whole number and a decimal.

**Find the product.**  $13 \times 6.8$

**Step 1** Draw a large rectangle. Label its longer side 13 and its shorter side 6.8. The area of the large rectangle represents the product, 13  $\times$  6.8.

**Step 2** Rewrite the factors in expanded form. Divide the large rectangle into four smaller rectangles. Use the expanded forms to label the smaller rectangles.

$$13 = \underline{10} + \underline{3} \quad 6.8 = \underline{6} + \underline{0.8}$$



**Step 3** Multiply to find the area of each small rectangle.

$$10 \times 6 = \underline{60} \quad 10 \times 0.8 = \underline{8} \quad 3 \times 6 = \underline{18} \quad 3 \times 0.8 = \underline{2.4}$$

**Step 4** Add to find the total area.

$$\underline{60} + \underline{8} + \underline{18} + \underline{2.4} = \underline{88.4}$$

So,  $13 \times 6.8 = \underline{88.4}$ .

**Draw a model to find the product.**

1.  $18 \times 0.25 =$  \_\_\_\_\_

2.  $26 \times 7.2 =$  \_\_\_\_\_

**Find the product.**

3.  $17 \times 9.3 =$  \_\_\_\_\_

4.  $21 \times 43.5 =$  \_\_\_\_\_

5.  $48 \times 4.74 =$  \_\_\_\_\_

Name \_\_\_\_\_

## Estimate Quotients

You can use multiples and compatible numbers to estimate decimal quotients.

**Estimate.**  $249.7 \div 31$

**Step 1** Round the divisor, 31, to the nearest 10.

31 rounded to the nearest 10 is 30.

**Step 2** Find the multiples of 30 that the dividend, 249.7, is between.

249.7 is between 240 and 270.

**Step 3** Divide each multiple by the rounded divisor, 30.

$$240 \div 30 = \underline{8} \quad 270 \div 30 = \underline{9}$$

So, two possible estimates are 8 and 9.

Use compatible numbers to estimate the quotient.

1.  $23.6 \div 7$

2.  $469.4 \div 62$

\_\_\_\_\_  $\div$  \_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_  $\div$  \_\_\_\_\_ = \_\_\_\_\_

Estimate the quotient.

3.  $338.7 \div 49$

4.  $75.1 \div 9$

5.  $674.8 \div 23$

6.  $61.9 \div 7$

7.  $96.5 \div 19$

8.  $57.2 \div 8$

Name \_\_\_\_\_

## Subtraction with Unlike Denominators

You can use fraction strips to help you subtract fractions with unlike denominators. Trade fraction strips of fractions with unlike denominators for equivalent strips of fractions with like denominators.

Use fraction strips to find the difference. Write your answer in simplest form.

$$\frac{1}{2} - \frac{1}{10}$$

**Step 1** Use a  $\frac{1}{2}$  fraction strip to model the first fraction.



**Step 2** Trade the  $\frac{1}{2}$  strip for five  $\frac{1}{10}$  strips.



$$\frac{1}{2} - \frac{1}{10} = \frac{5}{10} - \frac{1}{10}$$

**Step 3** Subtract by taking away  $\frac{1}{10}$ .



$$\frac{5}{10} - \frac{1}{10} = \frac{4}{10}$$

So,  $\frac{1}{2} - \frac{1}{10} = \frac{4}{10}$ . Written in simplest form,  $\frac{4}{10} = \frac{2}{5}$ .

Use fraction strips to find the difference. Write your answer in simplest form.

1.  $\frac{7}{8} - \frac{1}{2}$

2.  $\frac{2}{3} - \frac{1}{4}$

3.  $\frac{5}{6} - \frac{1}{3}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4.  $\frac{1}{2} - \frac{1}{3}$

5.  $\frac{9}{10} - \frac{4}{5}$

6.  $\frac{2}{3} - \frac{5}{12}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

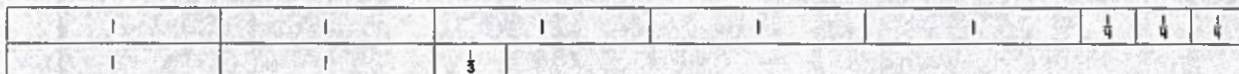
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## Add and Subtract Mixed Numbers

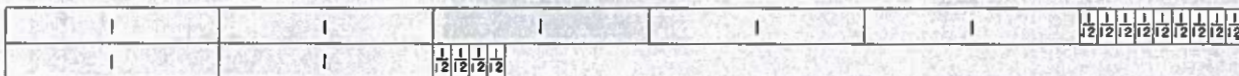
When you add or subtract mixed numbers, you may need to rename the fractions as fractions with a common denominator.

Find the sum. Write the answer in simplest form.  $5\frac{3}{4} + 2\frac{1}{3}$

**Step 1** Model  $5\frac{3}{4}$  and  $2\frac{1}{3}$ .



**Step 2** A common denominator for  $\frac{3}{4}$  and  $\frac{1}{3}$  is 12, so rename  $5\frac{3}{4}$  as  $5\frac{9}{12}$  and  $2\frac{1}{3}$  as  $2\frac{4}{12}$ .



**Step 3** Add the fractions.

$$\frac{9}{12} + \frac{4}{12} = \frac{13}{12}$$

**Step 4** Add the whole numbers

$$5 + 2 = 7$$

Add the sums. Write the answer in simplest form.

$$\frac{13}{12} + 7 = 7\frac{13}{12}, \text{ or } 8\frac{1}{12}$$

So,  $5\frac{3}{4} + 2\frac{1}{3} = 8\frac{1}{12}$ .

Find the sum or difference. Write your answer in simplest form.

1.  $2\frac{2}{9} + 4\frac{1}{6}$

2.  $10\frac{5}{6} + 5\frac{3}{4}$

3.  $11\frac{7}{8} - 9\frac{5}{6}$

4.  $18\frac{3}{5} - 14\frac{1}{2}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_

## Fraction Multiplication

To multiply fractions, you can multiply the numerators, then multiply the denominators. Write the product in simplest form.

**Multiply.**  $\frac{3}{10} \times \frac{4}{5}$

**Step 1** Multiply the numerators. Multiply the denominators.

$$\begin{aligned}\frac{3}{10} \times \frac{4}{5} &= \frac{3 \times 4}{10 \times 5} \\ &= \frac{12}{50}\end{aligned}$$

**Step 2** Write the product in simplest form.

$$\begin{aligned}\frac{12}{50} &= \frac{12 \div 2}{50 \div 2} \\ &= \frac{6}{25}\end{aligned}$$

So,  $\frac{3}{10} \times \frac{4}{5}$  is  $\frac{6}{25}$ .

Find the product. Write the product in simplest form.

1.  $\frac{3}{4} \times \frac{1}{5}$

\_\_\_\_\_

2.  $\frac{4}{7} \times \frac{5}{12}$

\_\_\_\_\_

3.  $\frac{3}{8} \times \frac{2}{9}$

\_\_\_\_\_

4.  $\frac{4}{5} \times \frac{5}{8}$

\_\_\_\_\_

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

\_\_\_\_\_

6.  $\frac{3}{4} \times 8$

\_\_\_\_\_

7.  $\frac{5}{8} \times \frac{2}{3}$

\_\_\_\_\_

8.  $\frac{5}{6} \times \frac{3}{8}$

\_\_\_\_\_

Name \_\_\_\_\_

## Divide Fractions and Whole Numbers

You can use a number line to help you divide a whole number by a fraction.

**Divide.**  $6 \div \frac{1}{2}$

**Step 1** Draw a number line from 0 to 6. Divide the number line into halves. Label each half on your number line, starting with  $\frac{1}{2}$ .



**Step 2** Skip count by halves from 0 to 6 to find  $6 \div \frac{1}{2}$ .

**Step 3** Count the number of skips. It takes **12** skips to go from 0 to 6. So the quotient is 12.

$$6 \div \frac{1}{2} = \underline{12} \text{ because } \underline{12} \times \frac{1}{2} = 6.$$

You can use fraction strips to divide a fraction by a whole number.

**Divide.**  $\frac{1}{2} \div 5$

**Step 1** Place a  $\frac{1}{2}$  strip under a 1-whole strip.

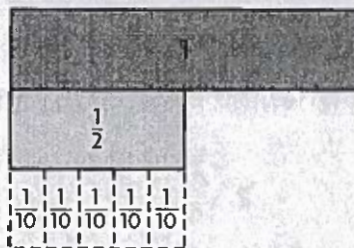
**Step 2** Find 5 fraction strips, all with the same denominator, that fit exactly under the  $\frac{1}{2}$  strip.

Each part is  $\frac{1}{10}$  of the whole.

**Step 3** Record and check the quotient.

$$\frac{1}{2} \div 5 = \frac{1}{10} \text{ because } \frac{1}{10} \times 5 = \frac{1}{2}.$$

So,  $\frac{1}{2} \div 5 = \frac{1}{10}$ .



**Divide.** Draw a number line or use fraction strips.

1.  $1 \div \frac{1}{2} =$  \_\_\_\_\_

2.  $2 \div \frac{1}{3} =$  \_\_\_\_\_

3.  $4 \div \frac{1}{4} =$  \_\_\_\_\_

4.  $\frac{1}{5} \div 3 =$  \_\_\_\_\_

5.  $\frac{1}{3} \div 2 =$  \_\_\_\_\_

6.  $4 \div \frac{1}{5} =$  \_\_\_\_\_

Name \_\_\_\_\_

# Ordered Pairs

A coordinate grid is like a sheet of graph paper bordered at the left and at the bottom by two perpendicular number lines. The **x-axis** is the horizontal number line at the bottom of the grid. The **y-axis** is the vertical number line on the left side of the grid.

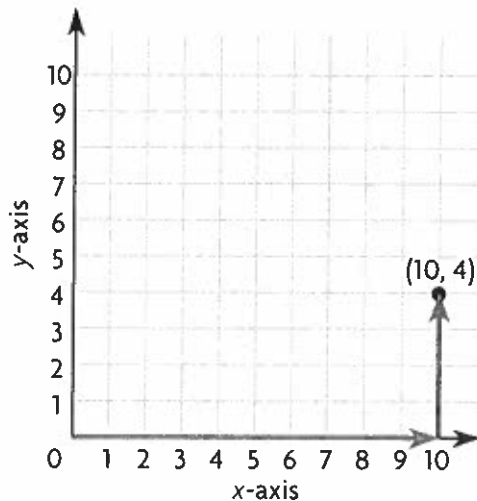
An ordered pair is a pair of numbers that describes the location of a point on the grid. An ordered pair contains two coordinates,  $x$  and  $y$ . The **x-coordinate** is the first number in the ordered pair, and the **y-coordinate** is the second number.

$(x, y) \longrightarrow (10, 4)$

**Plot and label  $(10, 4)$  on the coordinate grid.**

To graph an ordered pair:

- Start at the origin,  $(0, 0)$ .
- Think: The letter  $x$  comes before  $y$  in the alphabet. Move across the  $x$ -axis first.
- The  $x$ -coordinate is 10, so move 10 units right.
- The  $y$ -coordinate is 4, so move 4 units up.
- Plot and label the ordered pair  $(10, 4)$ .

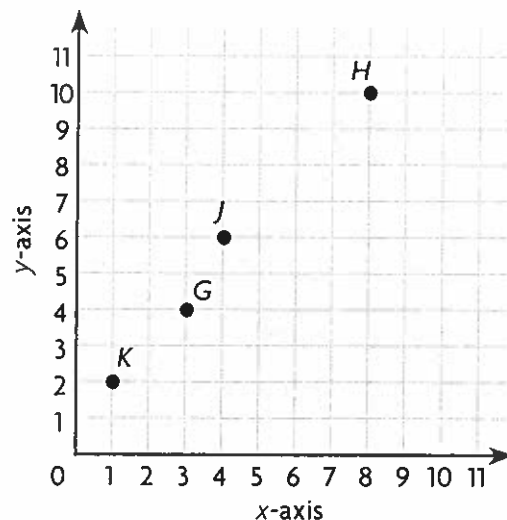


Use the coordinate grid to write an ordered pair for the given point.

1.  $G$  \_\_\_\_\_      2.  $H$  \_\_\_\_\_  
 3.  $J$  \_\_\_\_\_      4.  $K$  \_\_\_\_\_

Plot and label the points on the coordinate grid.

5.  $A(1, 6)$                       6.  $B(1, 9)$   
 7.  $C(3, 7)$                       8.  $D(5, 5)$   
 9.  $E(9, 3)$                       10.  $F(6, 2)$





Name \_\_\_\_\_

## Customary Length

You can convert one customary unit of length to another customary unit of length by multiplying or dividing.

Multiply to change from larger to smaller units of length.

Divide to change from smaller to larger units of length.

**Convert 3 feet to inches.**

**Step 1**

Decide:

Multiply or Divide

feet → inches  
larger → smaller

**Step 2**

Think:

1 ft = 12 in., so  
3 ft = (3 × 12) in.

**Step 3**

Multiply.

$$3 \times 12 = 36$$

### Customary Units of Length

1 foot (ft) = 12 inches (in.)  
1 yard (yd) = 3 feet  
1 mile (mi) = 5,280 feet  
1 mile = 1,760 yards

So, 3 feet = 36 inches.

**Convert 363 feet to yards.**

**Step 1**

Decide:

Multiply or Divide

feet → yards  
smaller → larger

**Step 2**

Think:

3 ft = 1 yd,  
so 363 ft = (363 ÷ 3) yd.

**Step 3**

Divide.

$$363 \div 3 = \underline{121}$$

So, 363 feet = 121 yards.

**Convert.**

1. 33 yd = \_\_\_\_\_ ft    2. 300 mi = \_\_\_\_\_ yd    3. 46 in. = \_\_\_\_ ft \_\_\_\_ in.

4. 96 yd = \_\_\_\_\_ ft    5. 48 ft = \_\_\_\_\_ yd    6. 2 mi 20 yd = \_\_\_\_\_ yd

**Compare. Write <, >, or =.**

7. 2 yd ○ 7 ft

8. 67 mi ○ 117,920 yd

9. 250 yd ○ 800 ft

10. 14 yd 2 ft ○ 16 ft

11. 34 ft 10 in. ○ 518 in.

12. 5 mi 8 ft ○ 8,800 yd

Name \_\_\_\_\_

# Customary Capacity

You can convert one unit of customary capacity to another by multiplying or dividing.

Multiply to change from larger to smaller units.

Divide to change from smaller to larger units.

**Convert 8 cups to quarts.**

**Step 1**

Decide:

Multiply or Divide

cups → quarts  
smaller → larger

**Step 2**

Think:

4 c = 1 qt,  
so 8 c = (8 ÷ 4) qt.

**Step 3**

Divide.

$$8 \div \underline{4} = \underline{2}$$

So, 8 cups = 2 quarts.

**Convert 19 gallons to quarts.**

**Step 1**

Decide:

Multiply or Divide

gallons → quarts  
larger → smaller

**Step 2**

Think:

1 gal = 4 qt,  
so 19 gal = (19 × 4) qt.

**Step 3**

Multiply.

$$19 \times \underline{4} = \underline{76}$$

So, 19 gallons = 76 quarts.

### Customary Units of Capacity

- 1 cup (c) = 8 fluid ounces (fl oz)
- 1 pint (pt) = 2 cups
- 1 quart (qt) = 2 pints
- 1 quart = 4 cups
- 1 gallon = 4 quarts

**Convert.**

1. 14 pt = \_\_\_\_\_ qt      2. 32 qt = \_\_\_\_\_ c      3. 7 c = \_\_\_\_\_ fl oz

4. 28 c = \_\_\_\_\_ pt      5. 9 gal = \_\_\_\_\_ qt      6. 16 c = \_\_\_\_\_ qt

**Compare. Write <, >, or =.**

7. 16 qt ○ 60 c

8. 88 fl oz ○ 11 c

9. 3 gal ○ 10 qt

10. 36 qt ○ 54 c

11. 66 fl oz ○ 9 c

12. 16 gal ○ 64 qt

Name \_\_\_\_\_

# Weight

You can convert one customary unit of weight to another by multiplying or dividing.

Multiply to change from larger to smaller units.

Divide to change from smaller to larger units.

**Customary Units of Weight**

1 pound (lb) = 16 ounces (oz)

1 ton (T) = 2,000 pounds

**Convert 96 ounces to pounds.****Step 1**

Decide:

Multiply or Divide

ounces → pounds

smaller → larger

**Step 2**

Think:

16 oz = 1 lb

so 96 oz = (96 ÷ 16) lb.**Step 3**

Divide.

$$96 \div \underline{16} = \underline{6}$$

So, 96 ounces = 6 pounds.

**Convert 4 pounds to ounces.****Step 1**

Decide:

Multiply or Divide

pounds → ounces

larger → smaller

**Step 2**

Think:

1 lb = 16 oz,

so 4 lb = (4 × 16) oz.**Step 3**

Multiply.

$$4 \times \underline{16} = \underline{64}$$

So, 4 pounds = 64 ounces.

**Convert.**

1. 14 lb = \_\_\_\_\_ oz

2. 12,000 lb = \_\_\_\_\_ T

3. 2 T = \_\_\_\_\_ lb

4. 7 lb = \_\_\_\_\_ oz

5. 22 lb = \_\_\_\_\_ oz

6. 16 oz = \_\_\_\_\_ lb

**Compare. Write <, >, or =.**

7. 1 T  3,000 lb

8. 3 lb  43 oz

9. 5 T  10,000 lb

10. 3 T  6,000 lb

11. 6 lb  96 oz

12. 16 T  6,400 lb

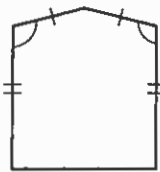
Name \_\_\_\_\_

# Polygons

A **polygon** is a closed plane figure formed by three or more line segments that meet at points called vertices. You can classify a polygon by the number of sides and the number of angles that it has.

**Congruent** figures have the same size and shape. In a **regular polygon**, all sides are congruent and all angles are congruent.

**Classify the polygon below.**



Polygon	Sides	Angles	Vertices
Triangle	3	3	3
Quadrilateral	4	4	4
Pentagon	5	5	5
Hexagon	6	6	6
Heptagon	7	7	7
Octagon	8	8	8
Nonagon	9	9	9
Decagon	10	10	10

How many sides does this polygon have? 5 sides

How many angles does this polygon have? 5 angles

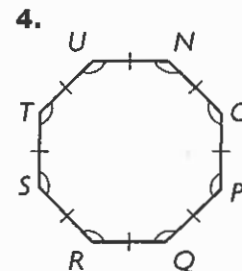
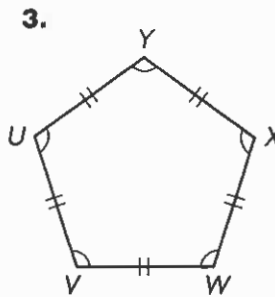
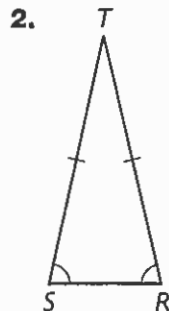
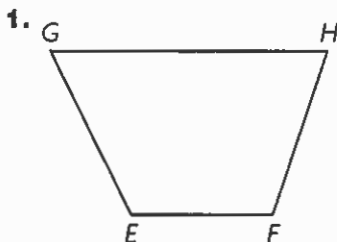
Name the polygon. pentagon

Are all the sides congruent? no

Are all the angles congruent? no

So, the polygon above is a pentagon. It is *not* a regular polygon.

Name each polygon. Then tell whether it is a *regular polygon* or *not a regular polygon*.



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Name \_\_\_\_\_

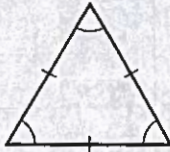
# Triangles

You can classify triangles by the length of their sides and by the measure of their angles. **Classify each triangle.**

Use a ruler to measure the side lengths.

- **equilateral triangle**

All sides are the same length.



- **isosceles triangle**

Two sides are the same length.



- **scalene triangle**

All sides are different lengths.



Use the corner of a sheet of paper to classify the angles.

- **acute triangle**

All three angles are acute.

- **obtuse triangle**

One angle is obtuse. The other two angles are acute.

- **right triangle**

One angle is right. The other two angles are acute.

Classify the triangle according to its side lengths.

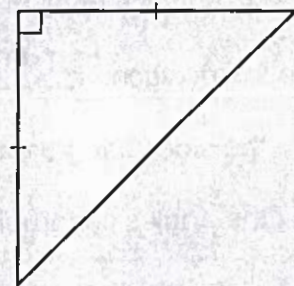
It has two congruent sides.

**The triangle is an isosceles triangle.**

Classify the triangle according to its angle measures.

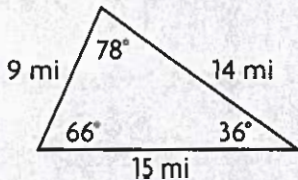
It has one right angle.

**The triangle is a right triangle.**

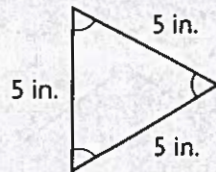


Classify each triangle. Write *isosceles*, *scalene*, or *equilateral*. Then write *acute*, *obtuse*, or *right*.

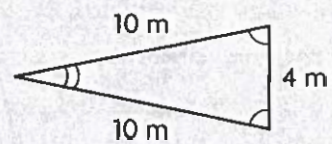
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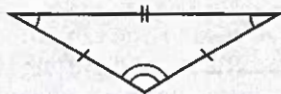
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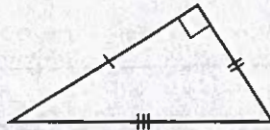
3.



4.



5.



6.

