

May 2022

Dear Parents/Guardians,

The attached math enrichment packet is meant to provide your daughter with a review of material she learned in 4th grade. Your daughter is expected to turn the completed packet into Mrs. Cardwell (5th grade) on the first day of the 2022-2023 school year. Please encourage your daughter to schedule time throughout the summer to work on the packet and not wait until the end of summer to begin.

Reminders for your daughter:

- Read and follow all directions.
- Show your work if the problem is one that you can show work on.

Have a great summer!

Love!

Mrs. Marking

Name _____

Round Numbers

When you round a number, you replace it with a number that is easier to work with but not as exact. You can round numbers to different place values.

Round 478,456 to the place value of the underlined digit.

Step 1 Identify the underlined digit.

The underlined digit, 4, is in the hundred thousands place.

Step 2 Look at the number to the right of the underlined digit.

If that number is 0–4, the underlined digit stays the same.

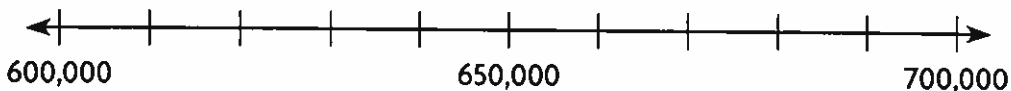
If that number is 5–9, the underlined digit is increased by 1.

The number to the right of the underlined digit is 7, so the underlined digit, 4, will be increased by one; $4 + 1 = \underline{5}$.

Step 3 Change all the digits to the right of the hundred thousands place to zeros.

So, 478,456 rounded to the nearest hundred thousand is 500,000.

1. In 2010, the population of North Dakota was 672,591 people. Use the number line to round this number to the nearest hundred thousand.



672,591 is closer to _____ than _____,

so it rounds to _____.

Round to the place value of the underlined digit.

2. 3,452

3. 180

4. \$72,471

5. 572,000

6. 950

7. 6,495

8. 835,834

9. 96,625

Name _____

Subtract Whole Numbers

Find the difference. $5,128 - 3,956$

Estimate first.

Think: 5,128 is close to 5,000. 3,956 is close to 4,000.

So, an estimate is $5,000 - 4,000 = 1,000$.

Write the problem vertically. Use grid paper to align digits by place value.

Step 1 Subtract the ones.

	5	1	2	8	
-	3	9	5	6	
				2	

$$8 - 6 = 2$$

Step 2 Subtract the tens.

		0	12		
	5	1	2	8	
-	3	9	5	6	
			7	2	

There are not enough tens to subtract. Regroup 1 hundred as 10 tens. $12 \text{ tens} - 5 \text{ tens} = 7 \text{ tens}$

Step 3 Subtract the hundreds.

	4	¹⁰ 0	12		
	5	1	2	8	
-	3	9	5	6	
		1	7	2	

There are not enough hundreds to subtract. Regroup 1 thousand as 10 hundreds. $10 \text{ hundreds} - 9 \text{ hundreds} = 1 \text{ hundred}$

Step 4 Subtract the thousands.

	4	¹⁰ 0	12		
	5	1	2	8	
-	3	9	5	6	
	1	1	7	2	

$$4 \text{ thousands} - 3 \text{ thousands} = 1 \text{ thousand}$$

The difference is 1,172. Since 1,172 is close to the estimate of 1,000, the answer is reasonable.

Estimate. Then find the difference.

1. Estimate: _____ 2. Estimate: _____ 3. Estimate: _____

$$\begin{array}{r} 6,253 \\ - 3,718 \\ \hline \end{array}$$

$$\begin{array}{r} 74,529 \\ - 38,453 \\ \hline \end{array}$$

$$\begin{array}{r} 232,318 \\ - 126,705 \\ \hline \end{array}$$

Name _____

Multiply 2-Digit Numbers with Regrouping

Use place value to multiply with regrouping.

Multiply. 7×63

Step 1 Estimate the product.

$$7 \times 60 = 420$$

Step 2 Multiply the ones. Regroup 21 ones as 2 tens 1 one. Record the 1 one below the ones column and the 2 tens above the tens column.

$$\begin{array}{r} 2 \\ 63 \\ \times 7 \\ \hline 1 \end{array}$$

$$7 \times 3 \text{ ones} = 21 \text{ ones}$$

Step 3 Multiply the tens. Then, add the regrouped tens. Record the tens.

$$\begin{array}{r} 2 \\ 63 \\ \times 7 \\ \hline 441 \end{array}$$

$$44 \text{ tens} = 4 \text{ hundreds} \\ 4 \text{ tens}$$

$$7 \times 6 \text{ tens} = 42 \text{ tens}$$

Add the 2 regrouped tens.

$$42 \text{ tens} + 2 \text{ tens} = 44 \text{ tens}$$

So, $7 \times 63 = 441$. Since 441 is close to the estimate of 420, it is reasonable.

Estimate. Then record the product.

1. Estimate: _____

$$\begin{array}{r} 42 \\ \times 6 \\ \hline \end{array}$$

2. Estimate: _____

$$\begin{array}{r} \$98 \\ \times 6 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 37 \\ \times 8 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} \$54 \\ \times 9 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 37 \\ \times 5 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 93 \\ \times 4 \\ \hline \end{array}$$

7. Estimate: _____

$$\begin{array}{r} 86 \\ \times 9 \\ \hline \end{array}$$

8. Estimate: _____

$$\begin{array}{r} 59 \\ \times 7 \\ \hline \end{array}$$

Name _____

Multiply 3-Digit and 4-Digit Numbers with Regrouping

When you multiply 3-digit and 4-digit numbers, you may need to regroup.

Estimate. Then find the product.

$$\begin{array}{r} \$1,324 \\ \times \quad 7 \\ \hline \end{array}$$

Step 1 Estimate the product.

$$\$1,324 \text{ rounds to } \$1,000; \$1,000 \times 7 = \$7,000.$$

Step 2 Multiply the 4 ones by 7.

Regroup the 28 ones as 2 tens 8 ones.

$$\begin{array}{r} 1,324 \\ \times 7 \\ \hline 8 \end{array}$$

Step 3 Multiply the 2 tens by 7.

Add the regrouped tens.

Regroup the 16 tens as 1 hundred 6 tens.

$$\begin{array}{r} 1,324 \\ \times 7 \\ \hline 68 \end{array}$$

Step 4 Multiply the 3 hundreds by 7.

Add the regrouped hundred.

Regroup the 22 hundreds as 2 thousands 2 hundreds.

$$\begin{array}{r} 1,324 \\ \times 7 \\ \hline 268 \end{array}$$

Step 5 Multiply the 1 thousand by 7.

Add the regrouped thousands.

$$\begin{array}{r} 1,324 \\ \times 7 \\ \hline 9,268 \end{array}$$

So, $7 \times \$1,324 = \$9,268$.

Since \$9,268 is close to the estimate of \$7,000, the answer is reasonable.

Estimate. Then find the product.

1. Estimate: _____ 2. Estimate: _____ 3. Estimate: _____ 4. Estimate: _____

$$\begin{array}{r} 3,184 \\ \times \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \$828 \\ \times \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2,637 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \$6,900 \\ \times \quad 7 \\ \hline \end{array}$$

Name _____

Multiply with Regrouping

Estimate. Then use regrouping to find 28×43 .

Step 1 Round to estimate the product. $30 \times 40 = 1,200$

Step 2 Think: $28 = 2$ tens 8 ones.

Multiply 43 by 8 ones.

$8 \times 3 = 24$. Record the 4. Write the regrouped 2 above the tens place.

$8 \times 40 = 320$. Add the regrouped tens: $320 + 20 = 340$.

$$\begin{array}{r} \cancel{2} \\ 43 \\ \times 28 \\ \hline 344 \end{array} \quad \longleftarrow 8 \times 43$$

Step 3 Multiply 43 by 2 tens.

$20 \times 3 = 60$ and $20 \times 40 = 800$.

Record 860 below 344.

$$\begin{array}{r} \cancel{2} \\ 43 \\ \times 28 \\ \hline 344 \\ 860 \\ \hline \end{array} \quad \longleftarrow 20 \times 43$$

Step 4 Add the partial products.

$$1,204 \quad \longleftarrow 344 + 860$$

So, $28 \times 43 = \underline{1,204}$. 1,204 is close to 1,200. The answer is reasonable.

Estimate. Then find the product.

1. Estimate: _____

2. Estimate: _____

3. Estimate: _____

$$\begin{array}{r} 36 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ \times 47 \\ \hline \end{array}$$

Divide by 1-Digit Numbers

Divide. $766 \div 6 = \blacksquare$

Step 1 Use place value to place the first digit.
Think: 7 hundreds can be shared among 6 groups without regrouping.

$$\begin{array}{r} 1 \\ 6 \overline{)766} \end{array} \quad \leftarrow \text{The first digit is in the hundreds place.}$$

Step 2 There is 1 hundred left over. Regroup 1 hundred, now there are 16 tens. Divide the tens.

$$\begin{array}{r} 1 \\ 6 \overline{)766} \\ - 6 \downarrow \\ \hline 16 \end{array} \quad \leftarrow 16 \text{ tens}$$

$$\begin{array}{r} 12 \\ 6 \overline{)766} \\ - 6 \\ \hline 16 \\ - 12 \\ \hline 4 \end{array} \quad \begin{array}{l} \leftarrow \text{Divide 16 tens by 6.} \\ \leftarrow \text{Multiply. } 6 \times 2 \text{ tens} \\ \leftarrow \text{Subtract.} \end{array}$$

Step 3 There are 4 tens left over. Regroup 4 tens, now there are 46 ones. Divide the ones.

$$\begin{array}{r} 12 \\ 6 \overline{)766} \\ - 6 \downarrow \\ \hline 16 \\ - 12 \downarrow \\ \hline 46 \end{array} \quad \leftarrow 46 \text{ ones}$$

$$\begin{array}{r} 127 \\ 6 \overline{)766} \\ - 6 \\ \hline 16 \\ - 12 \\ \hline 46 \\ - 42 \\ \hline 4 \end{array} \quad \begin{array}{l} \leftarrow \text{Divide 46 ones by 6.} \\ \leftarrow \text{Multiply. } 6 \times 7 \text{ ones} \\ \leftarrow \text{Subtract.} \end{array}$$

Step 4 Check to make sure that the remainder is less than the divisor. Write the answer.

$$\begin{array}{r} 127 \text{ r}4 \\ 6 \overline{)766} \end{array} \quad 4 < 6$$

Step 5 Use multiplication and addition to check your answer.

$$\begin{array}{r} 127 \leftarrow \text{quotient} \\ \times 6 \leftarrow \text{divisor} \\ \hline 762 \\ + 4 \leftarrow \text{remainder} \\ \hline 766 \leftarrow \text{dividend} \end{array}$$

Divide and check.

1. $4 \overline{)868}$

2. $2 \overline{)657}$

3. $7 \overline{)8,473}$

Factors and Multiples

You know that $1 \times 10 = \underline{10}$ and $2 \times 5 = \underline{10}$.

So, 1, 2, 5, and 10 are all **factors** of 10.

You can skip count to find **multiples** of a number:

Count by 1s: 1, 2, 3, 4, 5, 6, 7, 8, 9, **10**, ...

Count by 2s: 2, 4, 6, 8, **10**, 12, ...

Count by 5s: 5, **10**, 15, 20, 25, ...

Count by 10s: **10**, 20, 30, 40, ...

Note that **10** is a multiple of 1, 2, 5, and 10. A number is a multiple of all of its factors.

A **common multiple** is a multiple of two or more numbers. So, 10 is a common multiple of 1, 2, 5, and 10.

1. Multiply to list the next five multiples of 3.

3, _____, _____, _____, _____, _____

2. Multiply to list the next five multiples of 7.

7, _____, _____, _____, _____, _____

Is the number a factor of 8? Write *yes* or *no*.

3. 2

4. 8

5. 15

6. 20

Is the number a multiple of 4? Write *yes* or *no*.

7. 2

8. 12

9. 16

10. 18

Simplest Form

A fraction is in **simplest form** when 1 is the only factor that the numerator and denominator have in common.

Tell whether the fraction $\frac{7}{8}$ is in simplest form.

Look for common factors in the numerator and the denominator.

Step 1 The numerator of $\frac{7}{8}$ is 7. List all the factors of 7.	$1 \times 7 = 7$ The factors of 7 are 1 and 7.
Step 2 The denominator of $\frac{7}{8}$ is 8. List all the factors of 8.	$1 \times 8 = 8$ $2 \times 4 = 8$ The factors of 8 are 1, 2, 4, and 8.
Step 3 Check if the numerator and denominator of $\frac{7}{8}$ have any common factors greater than 1.	The only common factor of 7 and 8 is 1.
So, $\frac{7}{8}$ is in simplest form.	

Tell whether the fraction is in simplest form. Write *yes* or *no*.

1. $\frac{4}{10}$

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

3. $\frac{3}{5}$

Write the fraction in simplest form.

4. $\frac{4}{12}$

5. $\frac{6}{10}$

6. $\frac{3}{6}$

Common Denominators

A **common denominator** is a common multiple of the denominators of two or more fractions.

Write $\frac{2}{3}$ and $\frac{3}{4}$ as a pair of fractions with common denominators.

Step 1 Identify the denominators of $\frac{2}{3}$ and $\frac{3}{4}$.	$\frac{2}{3}$ and $\frac{3}{4}$ The denominators are 3 and 4.
Step 2 List multiples of 3 and 4. Circle common multiples.	3: 3, 6, 9, <u>12</u> , 15, 18 4: 4, 8, <u>12</u> , 16, 20 <u>12</u> is a common multiple of 3 and 4.
Step 3 Rewrite $\frac{2}{3}$ as a fraction with a denominator of 12.	$\frac{2}{3} = \frac{2 \times 4}{3 \times 4} = \frac{8}{12}$
Step 4 Rewrite $\frac{3}{4}$ as a fraction with a denominator of 12.	$\frac{3}{4} = \frac{3 \times 3}{4 \times 3} = \frac{9}{12}$
So, you can rewrite $\frac{2}{3}$ and $\frac{3}{4}$ as $\frac{8}{12}$ and $\frac{9}{12}$.	

Write the pair of fractions as a pair of fractions with a common denominator.

1. $\frac{1}{2}$ and $\frac{1}{3}$

2. $\frac{2}{4}$ and $\frac{5}{8}$

3. $\frac{1}{2}$ and $\frac{3}{5}$

4. $\frac{1}{4}$ and $\frac{5}{6}$

5. $\frac{2}{5}$ and $\frac{2}{3}$

6. $\frac{4}{5}$ and $\frac{7}{10}$

Add and Subtract Fractions

You can find and record the sums and the differences of fractions.

Add. $\frac{2}{6} + \frac{4}{6}$

Step 1 Model it.



Step 2 Think: How many sixths are there in all?

There are 6 sixths.

$$6 \text{ sixths} = \frac{6}{6}$$

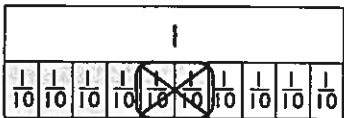
Step 3 Record it.

Write the sum as an addition equation.

$$\frac{2}{6} + \frac{4}{6} = \frac{6}{6}$$

Subtract. $\frac{6}{10} - \frac{2}{10}$

Step 1 Model it.



Step 2 Think: There are 6 tenths. I take away 2 tenths. How many tenths are left?

There are 4 tenths left.

$$4 \text{ tenths} = \frac{4}{10}$$

Step 3 Record it.

Write the difference as a subtraction equation.

$$\frac{6}{10} - \frac{2}{10} = \frac{4}{10}$$

Find the sum or difference.

1. 7 eighth-size parts – 4 eighth-size parts = _____

$$\frac{7}{8} - \frac{4}{8} = \underline{\hspace{2cm}}$$

2. $\frac{11}{12} - \frac{4}{12} = \underline{\hspace{2cm}}$ 3. $\frac{2}{10} + \frac{2}{10} = \underline{\hspace{2cm}}$ 4. $\frac{6}{8} - \frac{4}{8} = \underline{\hspace{2cm}}$

5. $\frac{2}{4} + \frac{2}{4} = \underline{\hspace{2cm}}$ 6. $\frac{4}{5} - \frac{3}{5} = \underline{\hspace{2cm}}$ 7. $\frac{1}{3} + \frac{2}{3} = \underline{\hspace{2cm}}$

Rename Fractions and Mixed Numbers

A **mixed number** is made up of a whole number and a fraction. You can use multiplication and addition to rename a mixed number as a fraction greater than 1.

Rename $2\frac{5}{6}$ as a fraction.

First, multiply the denominator, or the number of parts in the whole, by the whole number.

$$6 \times 2 = 12$$

Then, add the numerator to your product.

$$12 + 5 = 17$$

$$\text{So, } 2\frac{5}{6} = \frac{17}{6}.$$

$$2\frac{5}{6} = \frac{17}{6}$$

total number
of parts
number of
parts in the whole

You can use division to write a fraction greater than 1 as a mixed number.

Rename $\frac{16}{3}$ as a mixed number.

To rename $\frac{16}{3}$ as a mixed number, divide the numerator by the denominator.

Use the quotient and remainder to write a mixed number.

$$\text{So, } \frac{16}{3} = 5\frac{1}{3}.$$

$$\begin{array}{r} 5 \\ 3 \overline{)16} \\ -15 \\ \hline 1 \end{array}$$

Write the mixed number as a fraction.

1. $3\frac{2}{3} =$ _____

2. $4\frac{3}{5} =$ _____

3. $4\frac{3}{8} =$ _____

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

Write the fraction as a mixed number.

5. $\frac{32}{5} =$ _____

6. $\frac{19}{3} =$ _____

7. $\frac{15}{4} =$ _____

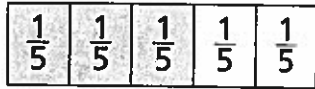
8. $\frac{51}{10} =$ _____

Multiply a Fraction by a Whole Number Using Models

You can use a model to multiply a fraction by a whole number.

Find the product of $4 \times \frac{3}{5}$.

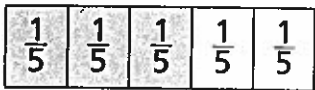
Use fraction strips. Show 4 groups of $\frac{3}{5}$ each.



1 group of $\frac{3}{5} = \frac{3}{5}$



2 groups of $\frac{3}{5} = \frac{6}{5}$



3 groups of $\frac{3}{5} = \frac{9}{5}$

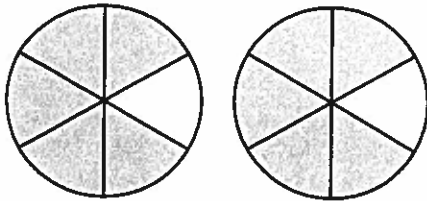


4 groups of $\frac{3}{5} = \frac{12}{5}$

So, $4 \times \frac{3}{5} = \frac{12}{5}$.

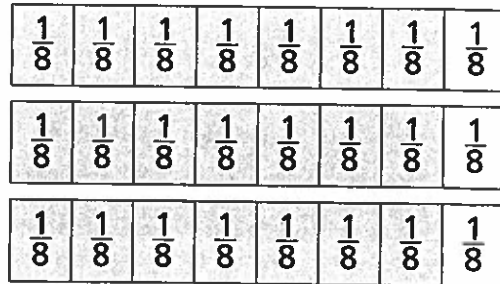
Multiply.

1.



$2 \times \frac{5}{6} = \underline{\hspace{2cm}}$

2.



$3 \times \frac{7}{8} = \underline{\hspace{2cm}}$

3. $6 \times \frac{2}{3} = \underline{\hspace{2cm}}$

4. $2 \times \frac{9}{10} = \underline{\hspace{2cm}}$

5. $5 \times \frac{3}{4} = \underline{\hspace{2cm}}$

6. $4 \times \frac{5}{8} = \underline{\hspace{2cm}}$

7. $7 \times \frac{2}{5} = \underline{\hspace{2cm}}$

8. $8 \times \frac{4}{6} = \underline{\hspace{2cm}}$

Equivalent Fractions and Decimals

Lori ran $\frac{20}{100}$ mile. How many tenths of a mile did she run?

Write $\frac{20}{100}$ as an equivalent fraction with a denominator of 10.

Step 1 Think: 10 is a common factor of the numerator and the denominator.

Step 2 Divide the numerator and denominator by 10.

$$\frac{20}{100} = \frac{20 \div 10}{100 \div 10} = \frac{2}{10}$$

So, Lori ran $\frac{2}{10}$ mile.

Use a place-value chart.

Step 1 Write $\frac{20}{100}$ as an equivalent decimal.

Ones	·	Tenths	Hundredths
0	·	2	0

Step 2 Think: 20 hundredths is 2 tenths 0 hundredths

Ones	·	Tenths
0	·	2

So, Lori ran 0.2 mile.

Write the number as hundredths in fraction form and decimal form.

1. $\frac{9}{10}$

2. 0.6

3. $\frac{4}{10}$

Write the number as tenths in fraction form and decimal form.

4. $\frac{70}{100}$

5. $\frac{80}{100}$

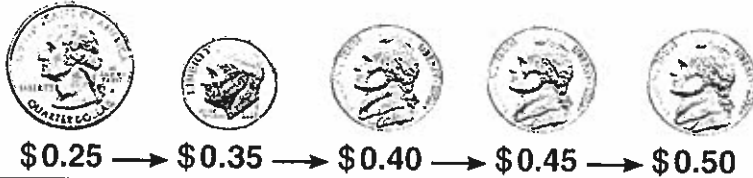
6. 0.50

Relate Fractions, Decimals, and Money

Write the total money amount. Then write the amount as a fraction and as a decimal in terms of a dollar.



Step 1 Count the value of coins from greatest to least. Write the total money amount.



Step 2 Write the total money amount as a fraction of a dollar.

The total money amount is \$0.50, which is the same as 50 cents.

Think: There are 100 cents in a dollar.

So, the total amount written as a fraction of a dollar is:

$$\frac{50 \text{ cents}}{100 \text{ cents}} = \frac{50}{100}$$

Step 3 Write the total money amount as a decimal.

Think: I can write \$0.50 as 0.50.

The total money amount is $\frac{50}{100}$ written as a fraction of a dollar, and 0.50 written as a decimal.

Write the total money amount. Then write the amount as a fraction or a mixed number and as a decimal in terms of a dollar.

1.



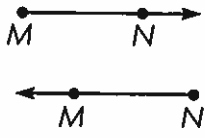
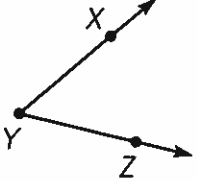
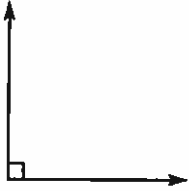
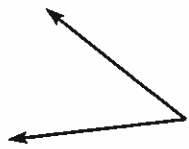
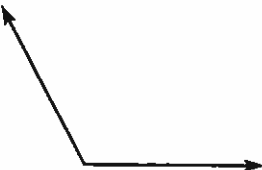



2.



Name _____

Lines, Rays, and Angles

Name	What it looks like	Think	
point D	$D \bullet$	A point names a location in space.	
line AB ; \overleftrightarrow{AB} line BA ; \overleftrightarrow{BA}		A line continues without end in both directions.	
line segment AB ; \overline{AB} line segment BA ; \overline{BA}		"Segment" means part. A line segment is part of a line. It is named by its two endpoints.	
ray MN ; \overrightarrow{MN} ray NM ; \overrightarrow{NM}		A ray has one endpoint and continues without end in one direction. A ray is named using two points. The endpoint is always named first.	
angle XYZ ; $\angle XYZ$ angle ZYX ; $\angle ZYX$ angle Y ; $\angle Y$		Two rays or line segments that share an endpoint form an angle. The shared point is the vertex of the angle.	
A right angle forms a square corner.	An acute angle is less than a right angle.	An obtuse angle is greater than a right angle and less than a straight angle.	A straight angle forms a line.
			

Draw and label an example of the figure.

1. \overline{PQ}

2. \overrightarrow{KJ}

3. obtuse $\angle FGH$

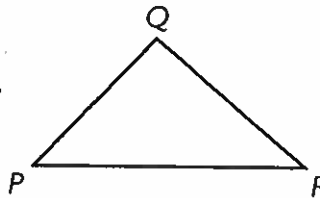
Classify Triangles by Angles

A triangle is a polygon with 3 sides and 3 angles.

Each pair of sides joins at a vertex.

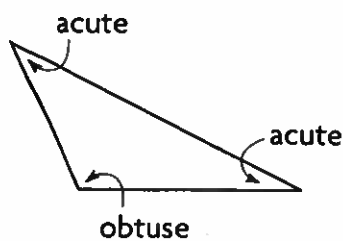
You can name a triangle by its vertices.

$\triangle PQR$ $\triangle QRP$ $\triangle RPQ$
 $\triangle PRQ$ $\triangle QPR$ $\triangle RQP$

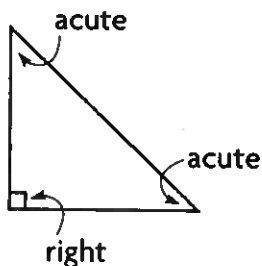


There are 3 types of triangles. All triangles have at least 2 acute angles.

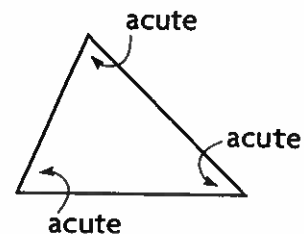
Obtuse triangle
one obtuse angle



Right triangle
one right angle



Acute triangle
three acute angles



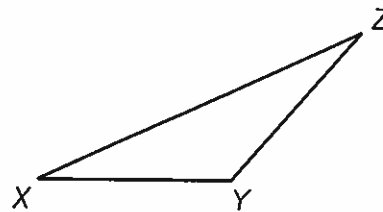
1. Name the triangle. Tell whether each angle is *acute*, *right*, or *obtuse*. A name for the triangle

is _____.

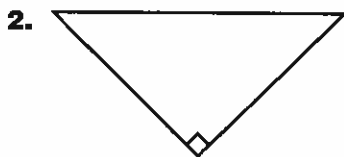
$\angle X$ is _____.

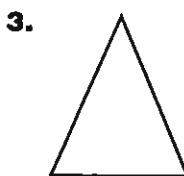
$\angle Y$ is _____.

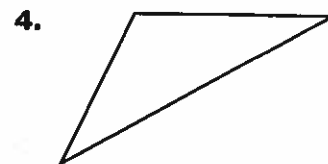
$\angle Z$ is _____.



Classify each triangle. Write *acute*, *right*, or *obtuse*.







Customary Units of Length

A ruler is used to measure length. A ruler that is 1 foot long shows 12 inches in 1 foot. A ruler that is 3 feet long is called a yardstick. There are 3 feet in 1 yard.

How does the size of a foot compare to the size of an inch?

Step 1 A small paper clip is about 1 inch long. Below is a drawing of a chain of paper clips that is about 1 foot long. Number each paper clip, starting with 1.



Step 2 Complete this sentence.

In the chain of paper clips shown, there are 12 paper clips.

Step 3 Compare the size of 1 inch to the size of 1 foot.

There are 12 inches in 1 foot.

So, 1 foot is 12 times as long as 1 inch.

Complete.

1. 5 feet = _____ inches

2. 3 yards = _____ feet

3. 5 yards = _____ feet

4. 4 feet = _____ inches

5. 6 feet = _____ inches

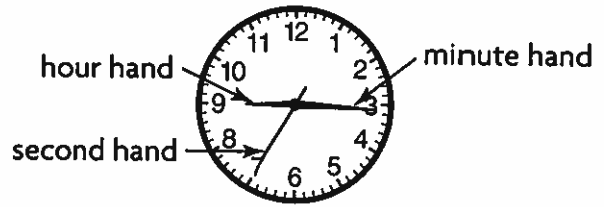
6. 8 yards = _____ feet

Name _____

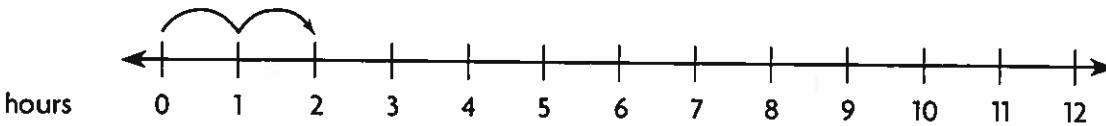
Units of Time

Some analog clocks have an hour hand, a minute hand, and a **second** hand.

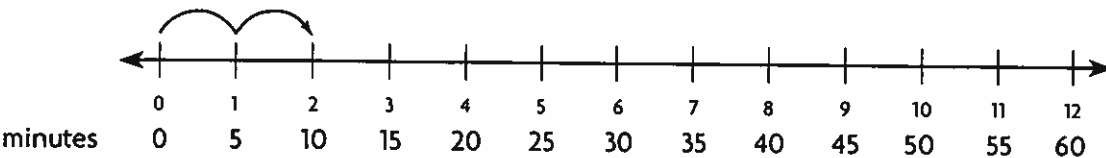
There are 60 seconds in a minute. The second hand makes 1 full turn every minute. There are 60 minutes in an hour. The minute hand makes 1 full turn every hour. The hour hand makes 1 full turn every 12 hours.



You can think of the clock as unrolling to become a number line.



The hour hand moves from one number to the next in 1 hour.



The minute hand moves from one number to the next in 5 minutes.

Use the table at the right to change between units of time.

1 hour = 60 minutes, or 60×60 seconds, or 3,600 seconds.

So, 1 hour is 3,600 times as long as 1 second.

1 day = 24 hours, so 3 days = 3×24 hours, or 72 hours.

1 year = 12 months, so 5 years = 5×12 months, or 60 months.

Units of Time

- 1 minute = 60 seconds
- 1 hour = 60 minutes
- 1 day = 24 hours
- 1 week = 7 days
- 1 year = 12 months
- 1 year = 52 weeks

Complete.

1. 3 hours = _____ minutes

2. 2 years = _____ weeks

3. 6 days = _____ hours

4. 5 weeks = _____ days

5. 8 minutes = _____ seconds

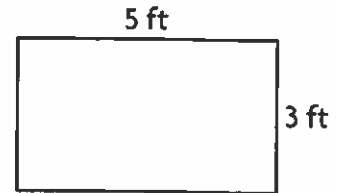
6. 7 years = _____ months

Name _____

Perimeter

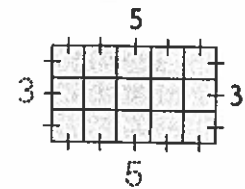
Perimeter is the distance around a shape. You can use grid paper to count the number of units around the outside of a rectangle to find its perimeter.

How many feet of ribbon are needed to go around the bulletin board?



Step 1 On grid paper, draw a rectangle that has a length of 5 units and a width of 3 units.

Step 2 Find the length of each side of the rectangle. Mark each unit of length as you count.



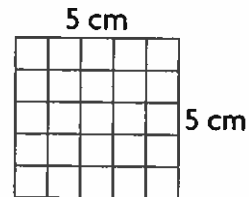
Step 3 Add the side lengths. $5 + 3 + 5 + 3 = 16$

The perimeter is 16 feet.

So, 16 feet of ribbon are needed to go around the bulletin board.

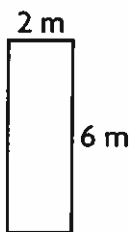
1. What is the perimeter of this square?

___ + ___ + ___ + ___ = ___ centimeters



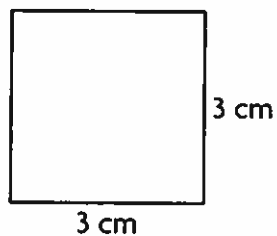
Find the perimeter of the rectangle or square.

2.



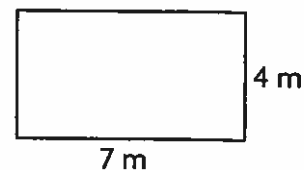
_____ meters

3.



_____ centimeters

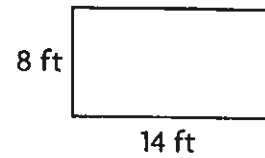
4.



_____ meters

Area

Area is the measure of the number of **unit squares** needed to cover a surface. A unit square is a square with a side length of 1 unit. It has an area of 1 **square unit**.

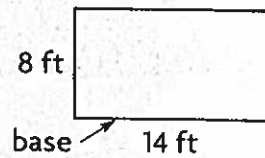


Find the area of the rectangle at the right.

You can use the formula **Area = base × height**.

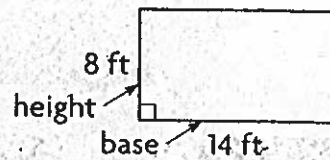
Step 1 Identify one side as the base.

The base is 14 feet.



Step 2 Identify a perpendicular side as the height.

The height is 8 feet.



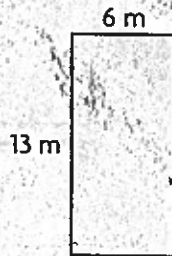
Step 3 Use the formula to find the area.

$$\begin{aligned} \text{Area} &= \text{base} \times \text{height} \\ &= 14 \times 8 \\ &= 112 \end{aligned}$$

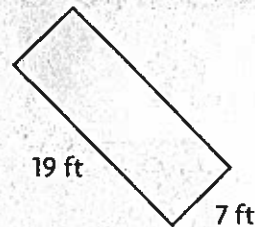
So, the area of the rectangle is 112 square feet.

Find the area of the rectangle or square.

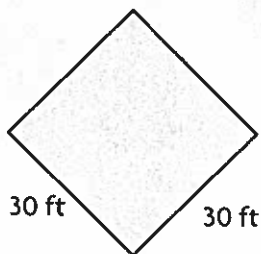
1.



2.



3.



4.

