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ELEMENTARY

# MATH-in-a-Flash

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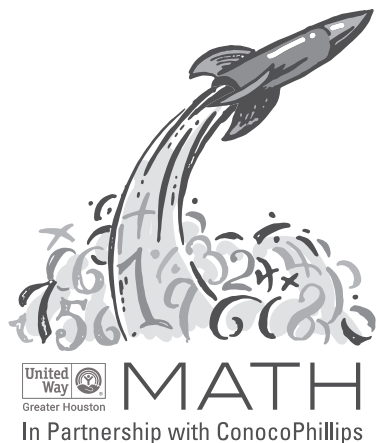


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# MATH

In Partnership with ConocoPhillips

A workbook full of amazing  
math problems and brain teasers  
that you can do in a flash.



## **Welcome students!**

This book is designed for you to try your hand at some cool math problems and brain teasers that you can do in a flash! Each day of the week you will solve a fun problem.

## **How it works:**

- There is one problem per page with space for you to show your work.
- Take your time and read all problems carefully.
- If you are stuck, look in the back for the Resource Page.
- Remember, if you are in doubt, draw it!

We hope you enjoy *Math-in-a-Flash*. If you have any questions please ask an adult. We can't wait to see how fast your confidence builds each day as you work through the *math... in a flash!*

# Week One



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An octopus has eight legs. There are five octopus in the tank. How many legs do you see?



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Write the place value of the underlined digit in each number.

342 = \_\_\_\_\_



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Use  $>$ ,  $<$ , or  $=$  to compare the numbers

$$700 + 50 + 6 \underline{\hspace{1cm}} 700 + 60 + 5$$



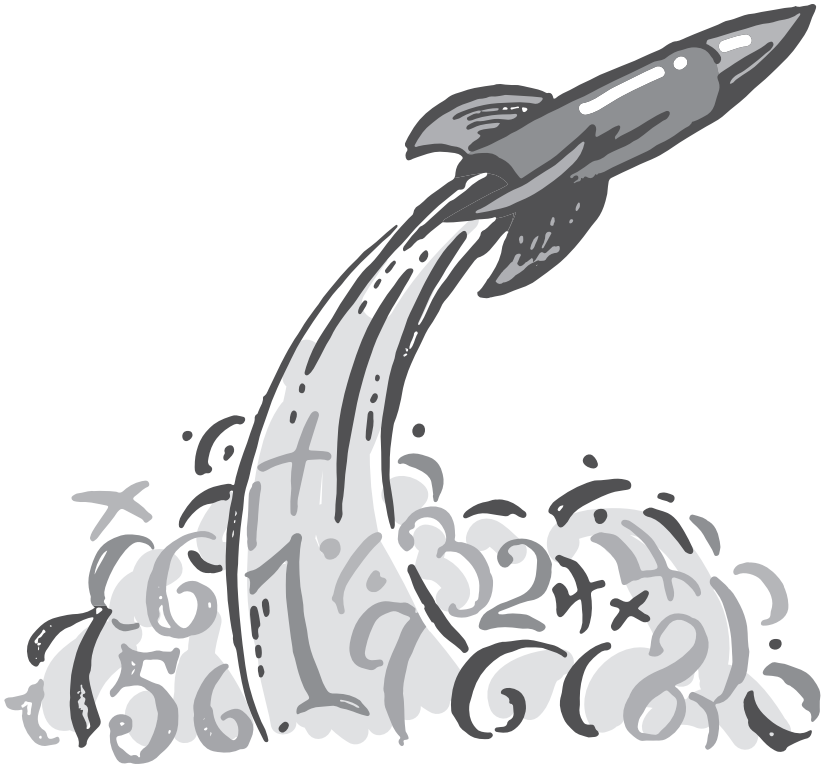
# MATH-in-a-Flash

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Find the perimeter:



# Week Two



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Find the missing number.

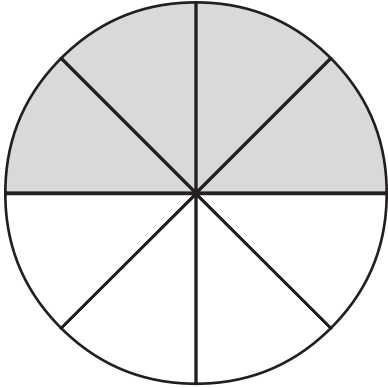
$$2 + 30 + 100 + \underline{\hspace{2cm}} = 2132$$



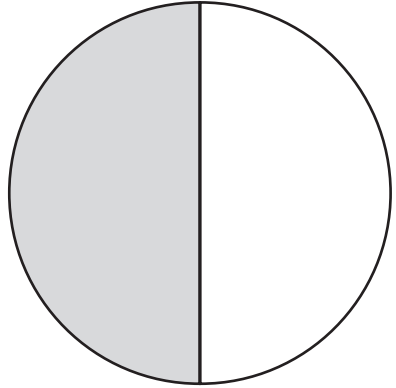
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Fill in the equivalent fraction:



$\frac{4}{8}$



$\frac{1}{2}$



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A week has seven days. A weekend has two days. Shade this fraction strip to represent a weekend as a part of a week. What is the fraction?

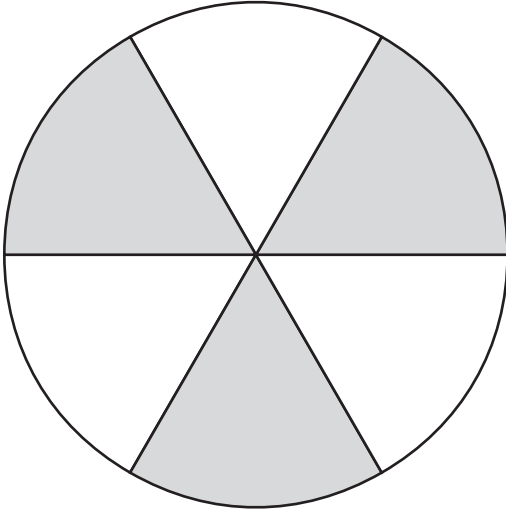
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Determine the fraction:



$\frac{3}{6}$



# Week Three



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Five friends went to see a movie. It cost \$2.50 for each person to get into the movie. How much did it cost for everyone to get into the movie?



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Abby gets paid \$5 dollars each day that she babysits. She works four days a week. How much does she make in a month? (*assume there are 4 weeks in a month*) Remember to show your work.



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Find the missing number.

$$800 + 50 + \underline{\hspace{2cm}} + 1 = 7851$$





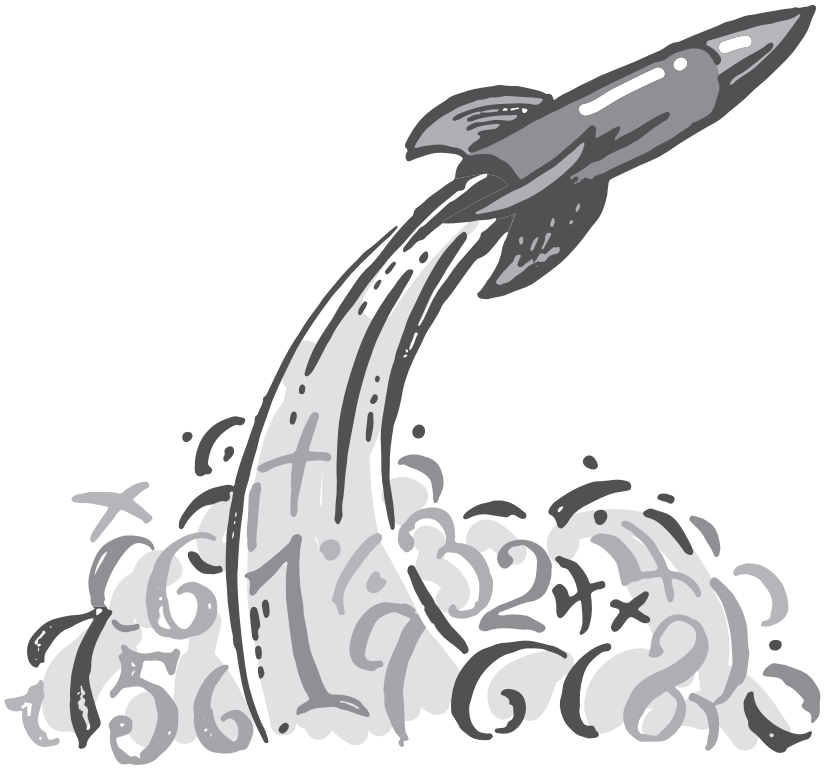
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Chris has two five dollar bills. Can he buy two slices of pizza if they cost three dollars each.



# Week Four



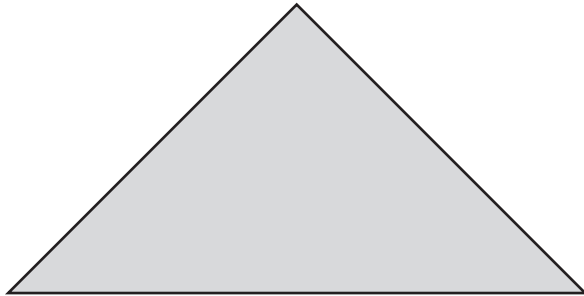
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**Sides:**

**Lines of symmetry:**

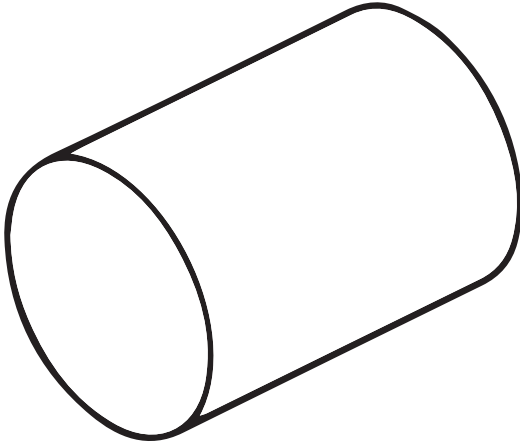
**Name the shape:**



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Classify the 3D shape:



Faces: \_\_\_\_\_

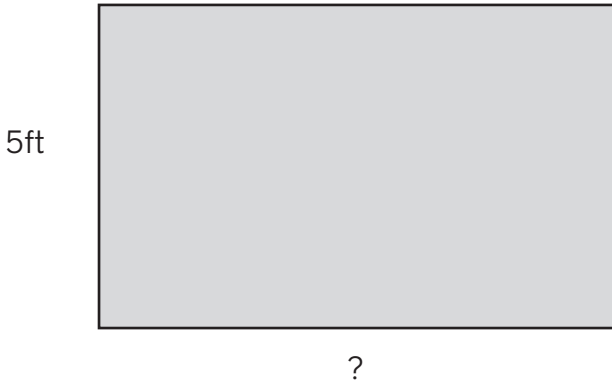
Shape: \_\_\_\_\_



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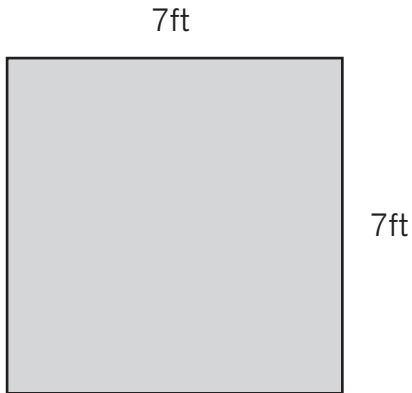
If the perimeter is 26 ft. what is the length of the missing side?



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Find the perimeter of the square:



# So you think you can math?

More Challenge Questions



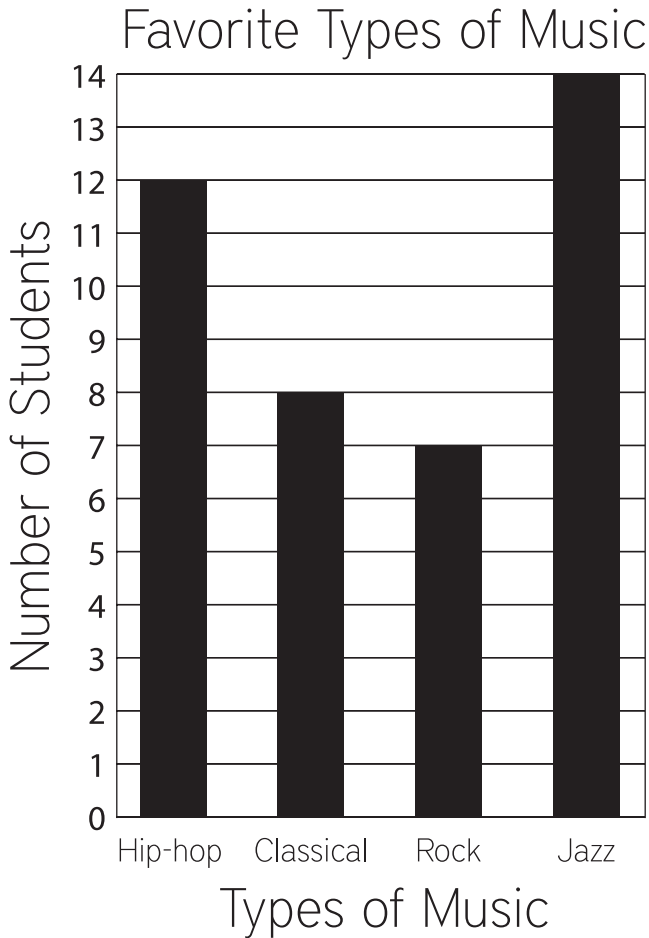
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How many did not choose rock as their favorite type of music?





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Based on the Stem and Leaf plot below, what number does Stem 2 and Leaf 6 represent?

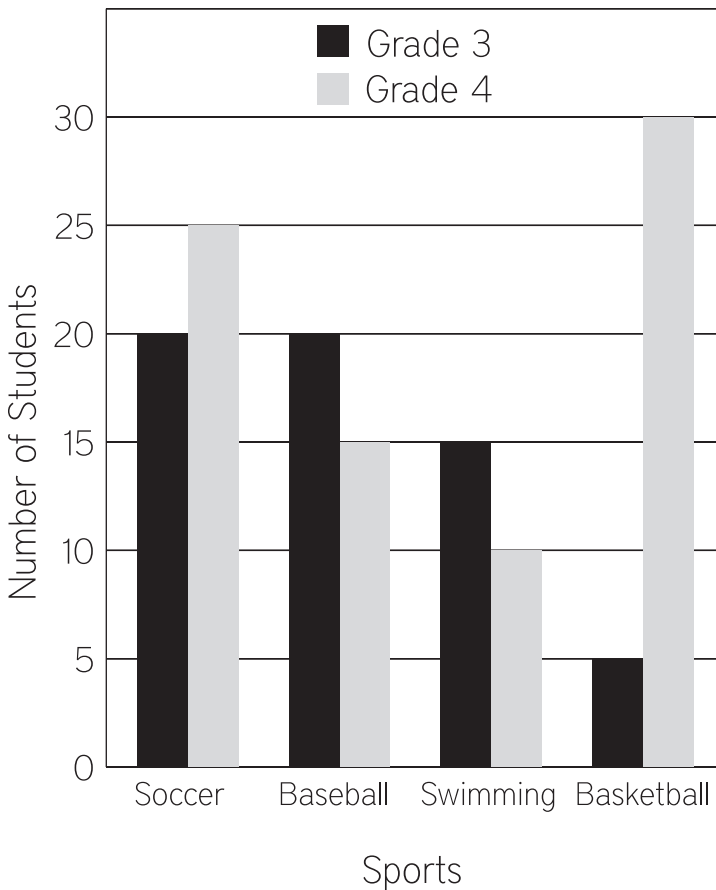
Stem	Leaf
1	2 3 3 5 7 8
2	2 6 6
3	5
4	0



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How many 4th graders chose basketball or soccer as their favorite sports?

## Favorite sports of Third and Fourth Graders



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Nicole walked to the store. It takes her 45 minutes to walk to the store and back home. If Nicole leaves at 2:30 pm, what time will she make it back home?



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The seven sets of numbers below all have a certain logic that is the same in all seven numbers. See if you can determine the relationship and come up with the final digit of the last number.

- a. 1 3 8 2 1
- b. 5 1 3 4 2
- c. 6 0 0 2 7
- d. 9 2 0 4 0
- e. 2 5 1 1 6
- f. 4 4 4 0 3
- g. 7 0 3 1 ?



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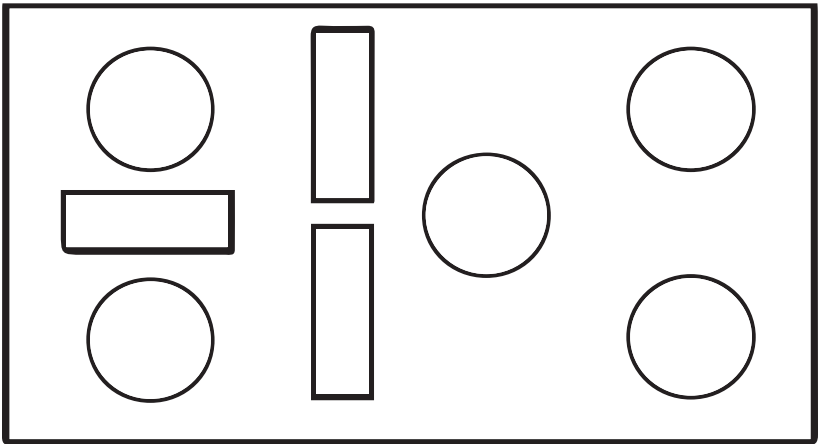
Janet is purchasing drinks for a party. She bought 4 packs of Dr. Pepper that came with a dozen cans. She purchased 2 packs of Sprite that came in packs of 8 cans, and she purchased 3 packs of Pepsi that came in packages of 6 cans. What is the total number of cans of soda that Janet purchased for the party? *Remember to show your work.*



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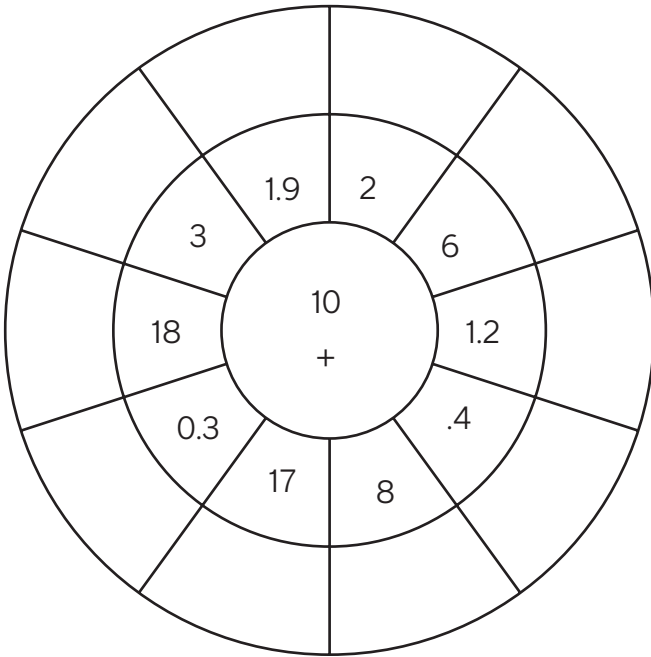
The floor plan below shows how The Venue sets up their main conference room. The circular tables seat 12 guests and the rectangular tables seat 8 people. If after receiving the floor plan, Mary asks them to add on 1 more circular table, how many people can be seated at the circular table? What's the total amount of people in the Venue if all seats are filled? *Remember to show your work.*



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Add the following:



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A broken scale is used to measure the height of the plant. The length of the broken scale is 12 cm. The height of the plant is 4.15 times greater than the broken scale. What is the height of the plant? *Remember to show your work.*





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Mark uses the computer for 12 hours. If the average power consumption of a computer per hour is 299 watt, how much power does Mark use? *Remember to show your work.*



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What number does Stem 2 and Leaf 6 represent on the Stem and Leaf plot?

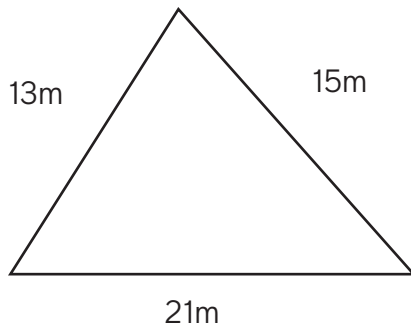
Stem	Leaf
1	2 3 3 5 7 8
2	2 6 6
3	5
4	0



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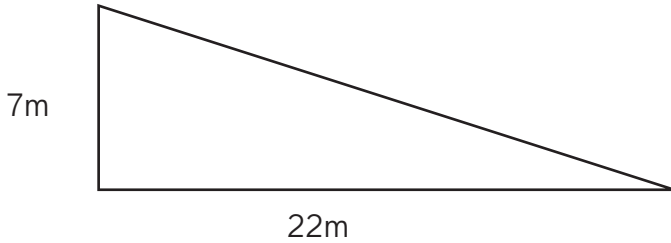
What is the perimeter of the triangle? *Remember to show your work.*



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Find the area of the triangle: *Remember to show your work.*



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Determine the equivalent fraction: *Remember to show your work.*

$$\frac{1}{2} =$$

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

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

c.  $\frac{2}{6}$

Comparing fractions: *Remember to show your work.*

Is  $\frac{3}{8} <$  or  $> \frac{5}{12}$



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Subtract the fraction and simplify if needed: *Remember to show your work.*

$$\frac{7}{6} - \frac{5}{6} =$$

Add the fraction: *Remember to show your work.*

$$\frac{3}{10} + \frac{4}{10} =$$

Add the fraction: *Remember to show your work.*

$$\frac{1}{3} + \frac{3}{8} =$$



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Write the following decimal as a fraction.

$0.27 =$



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Write the following decimal as a fraction.

$$0.5 =$$





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There are 14,240 books in a library. They are arranged on shelves that hold 8 books each. How many shelves are in the library? *Remember to show your work.*



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Jim rides the bus to and from school each day. A one-way trip is 8.12 kilometers. How many kilometers does he travel in 3 days? *Remember to show your work.*

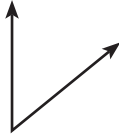


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Classify the angle

- a. Acute
- b. Obtuse
- c. Right



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Below is a partial magic square using the numbers 1-16. The rows, columns, and diagonals must each total the same sum. Place the final four numbers in the appropriate squares

16	9	2	7
6	?	?	13
11	?	?	4
1	8	15	10



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Convert.

23 ft 7 in = \_\_\_\_\_ in



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Angel read 2 books each week for 8 weeks over the summer. Lindsey read 3 books per week for 8 weeks over the summer. Emily read 4 books each week for 8 weeks over the summer. What is the total number of books that Angel and Lindsey read together? *Remember to show your work.*



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A rectangular field measures 10 ft. by 3 ft. What is the area of this field?



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Find the secret trail. Start from the circled number in the box. Using the operation provided at the bottom of the box, add the numbers to create a trail to the end of the circled number.

10	7	4	8
1	1	10	10
<b>START</b> → (10)	3	10	5
3	7	3	10
		+	(57) <b>END</b> ↑





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What's the missing number?

5 25 125 \_\_\_\_\_ 3,125 15,625



# MATH-in-a-Flash

Find the secret trail. Start from the circled number in the box. Using the operation provided at the bottom of the box, add or subtract the numbers to create a trail to the end of the circled number.

**START** →

9	2	4	2
4	5	5	5
5	6	6	5
4	10	8	7

+      **END** ↑

49

**START** →

5	7	8	1
9	1	10	3
5	1	6	9
30	10	5	2

-      **END** ↑

1



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Find the secret trail.

**START** →

(50)	9	2	4
7	4	2	5
10	9	1	6
3	3	10	7

-

(10)
------

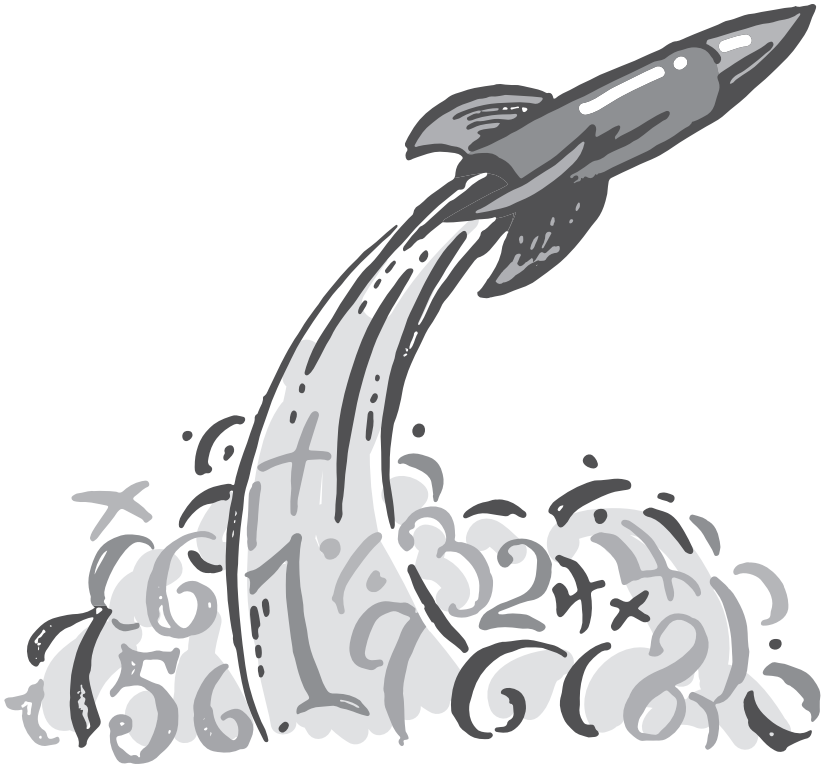
**END** ↑

Solve:

5	-	2	+	10	=	
-		+		-		+
2	+	6	-	3	=	
+		-		+		+
5	-	2	+	8	=	
=		=		=		=
	+		+		=	



# Resources



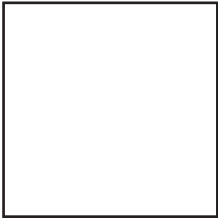
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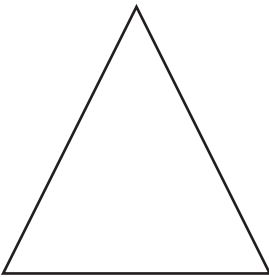
# MATH-in-a-Flash

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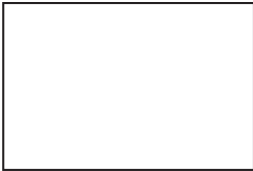
Perimeter of a square:  $4a$

Area of a square:  $A = a^2$



Perimeter of a triangle:  $a + b + c$

Area of a Triangle:  $A = \frac{1}{2}bh$



Perimeter of a rectangle:  $2l + 2w$

Area of a rectangle:  $l \cdot w$

Obtuse Angle= Greater than 90 degrees

Acute Angle= Less than 90 degrees

Right Angle= 90 degrees



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## Problem Solving Strategies

1. Read the Problem.
2. Circle the numbers.
3. Underline the facts (key words) you need to solve the problem.
4. Draw a picture if needed to help you solve the problem.
5. Solve the problem and show your work.

## Distance Conversion

12 inches = 1 foot

## Order of Operations:

Parenthesis ( )

Exponent <sup>Exponent</sup>

Multiply (x)

Divide ( $\div$ )

Add (+)

Subtract (-)

Less Than <

Greater Than >

