

# Grade 3 Mathematics

## Vocabulary Word Wall Cards

Mathematics vocabulary word wall cards provide a display of mathematics content words and associated visual cues to assist in vocabulary development. The cards should be used as an instructional tool for teachers and then as a reference for all students. **The cards are designed for print use only.**

### Table of Contents

#### Number and Number Sense

[Number Line](#)  
[Round](#)  
[Less Than](#)  
[Greater Than](#)  
[Equal To](#)  
[Place Value Position](#)  
[Fraction: Models for one-half/one-fourth](#)  
[Fraction: Models for two-thirds](#)  
[Fraction: Models for five-sixths](#)  
[Fraction: Models for three-eighths](#)  
[Numerator/Denominator](#)  
[Proper Fraction](#)  
[Improper Fraction](#)  
[Mixed Number](#)

#### Computation and Estimation

[Addition](#)  
[Subtraction](#)  
[Regroup/Rename](#)  
[Multiply: Product](#)  
[Multiplication: Set Model](#)  
[Multiplication: Array Model](#)  
[Multiplication: Area \(array\) Model](#)  
[Multiplication: Number Line Model](#)  
[Divide: Quotient](#)  
[Division: Number Line and Array Models](#)  
[Related Facts: Addition/Subtraction](#)  
[Related Facts: Multiplication/Division](#)  
[Equation: Number Sentence](#)  
[Fraction: Addition](#)  
[Fraction: Subtraction](#)

#### Measurement and Geometry

[Penny](#)  
[Nickel](#)  
[Dime](#)  
[Quarter](#)  
[Dollar](#)  
[Ruler: Centimeter and Inch](#)  
[Cup](#)  
[Pint](#)  
[Quart](#)  
[Gallon](#)  
[Liter](#)  
[Area: Square Units](#)  
[Perimeter: Units](#)  
[Clock: Minutes, One-half Hour, One Hour](#)  
[Elapsed Time](#)  
[Calendar](#)  
[Thermometer](#)  
[Plane Figures](#)  
[Polygons: Triangles](#)  
[Polygons: Quadrilaterals](#)  
[Polygons: Pentagon, Hexagon, Heptagon, and Octagon](#)  
[Polygons: Nonagon and Decagon](#)  
[Subdivide](#)  
[Combine](#)  
[Rectangle: Right Angle](#)  
[Square: Right Angle](#)  
[Triangle: Side and Vertex](#)  
[Congruent](#)  
[Noncongruent](#)  
[Line Segment](#)  
[Point](#)  
[Angle](#)  
[Line](#)  
[Ray](#)

## **Probability and Statistics**

[Bar Graph](#)

[Pictograph](#)

[Certain](#)

[Likely](#)

[Unlikely](#)

[Equally Likely](#)

[Impossible](#)

## **Patterns, Functions, and Algebra**

[Equal](#)

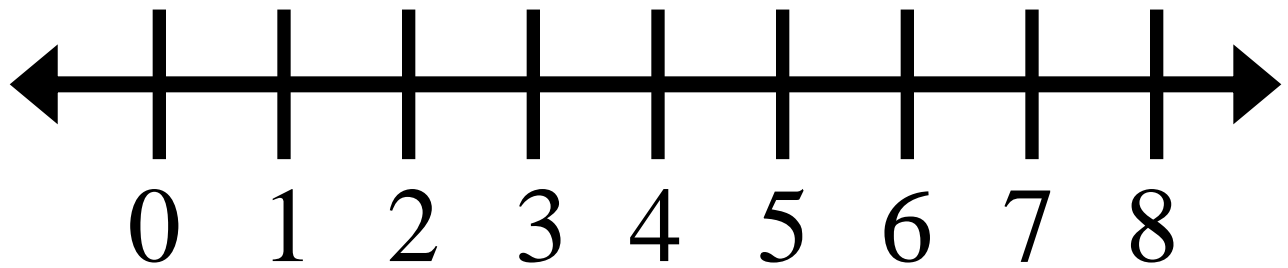
[Not equal](#)

[Pattern: Growing and Input/output Table](#)

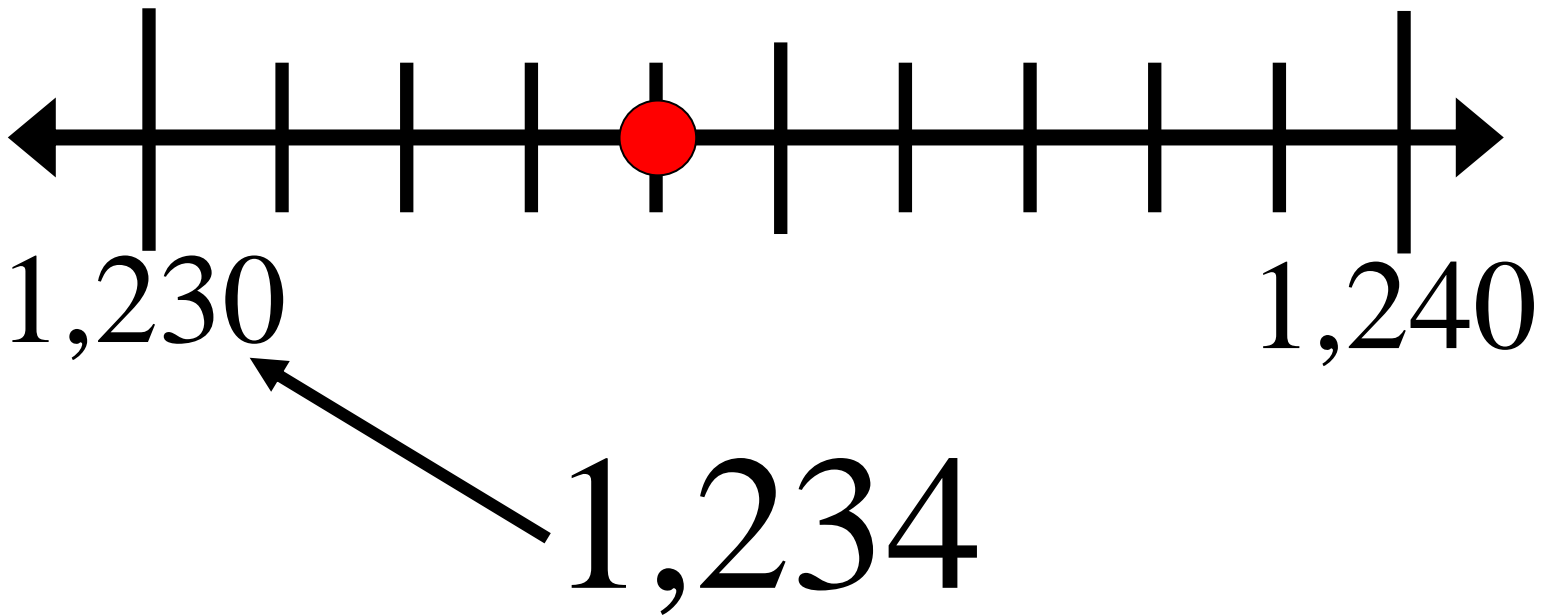
[Expression](#)

[Calculator](#)

# Number Line

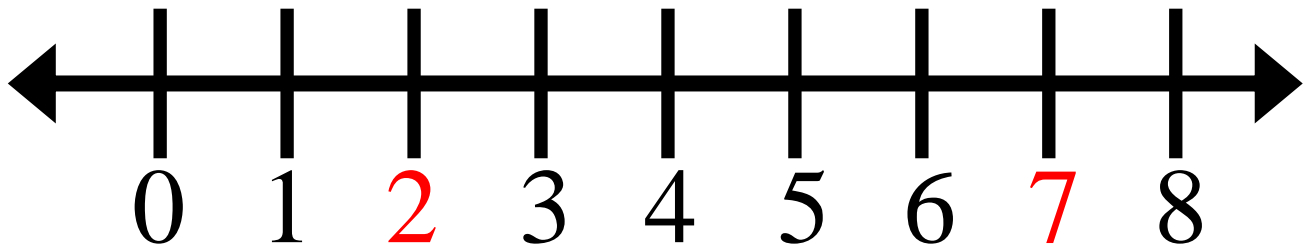
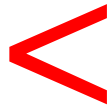


# Round

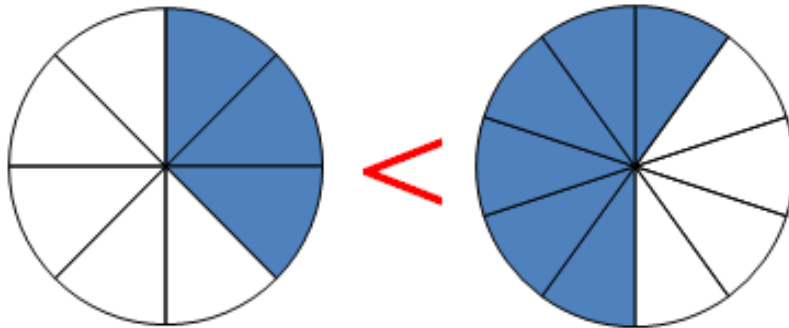


Round 1,234 to the  
nearest ten.

# Less Than



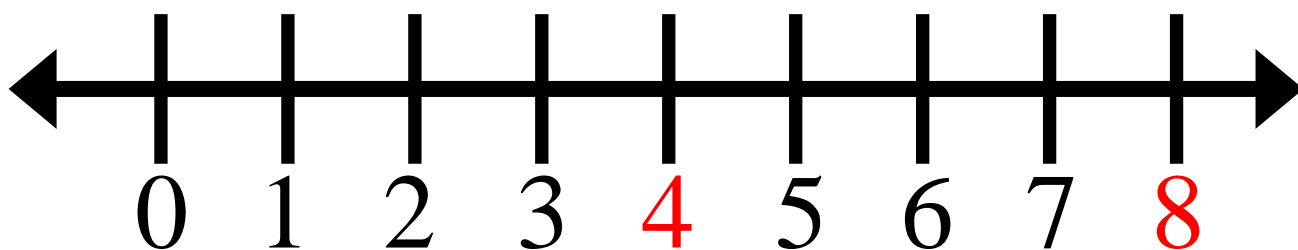
$$2 < 7$$



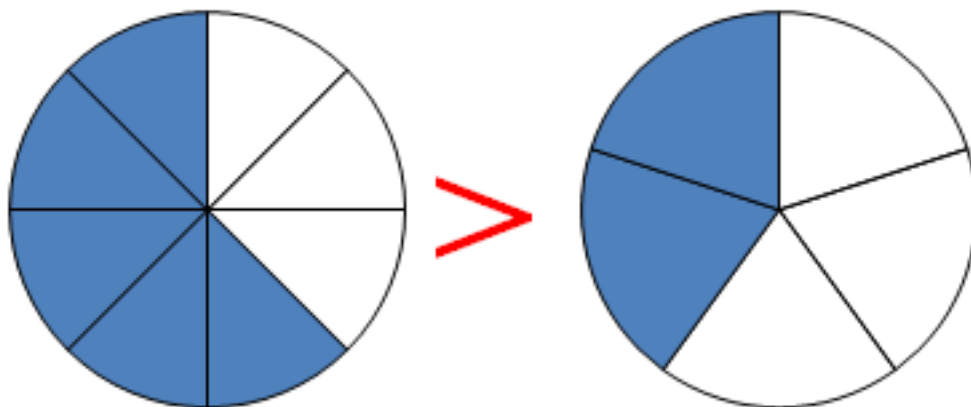
$$\frac{3}{8} < \frac{6}{10}$$

# Greater Than

>



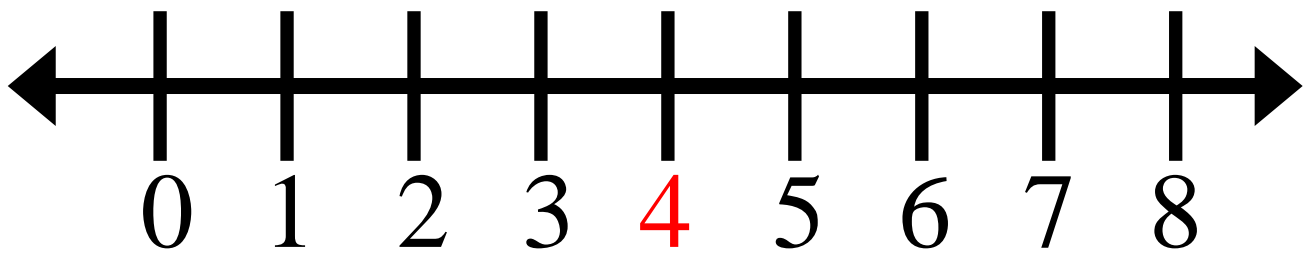
$$8 > 4$$



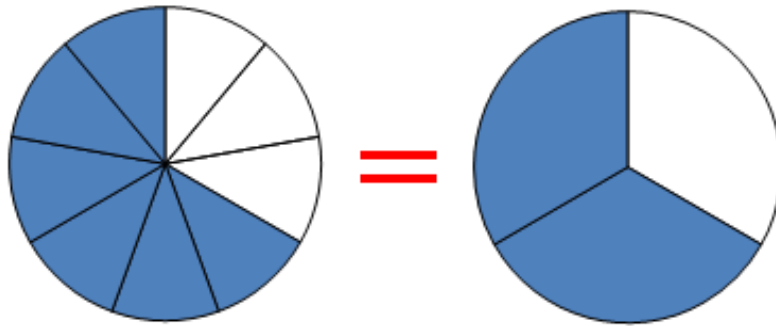
$$\frac{5}{8} > \frac{2}{5}$$

# Equal To

=



$$4 = 4$$



$$\frac{6}{9} = \frac{2}{3}$$

# Place Value Position

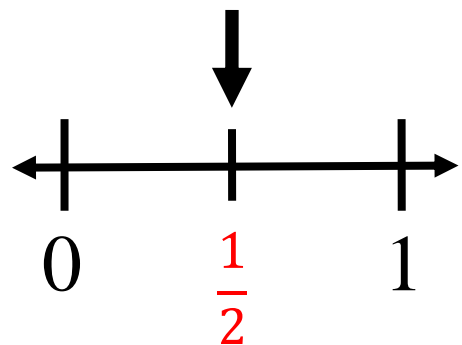
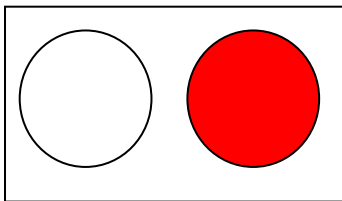
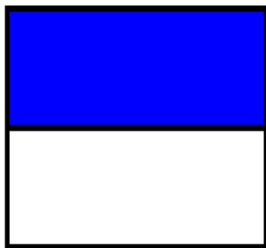
Hundred Thousands	Ten Thousands	One Thousands		Hundreds	Tens	Ones
2	3	5	,	4	8	6



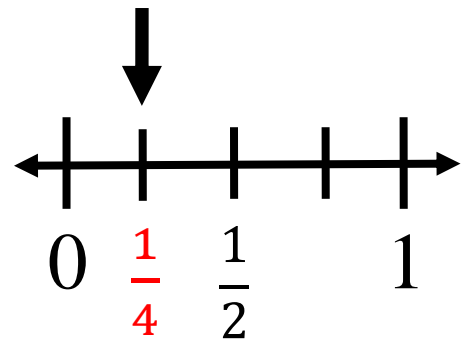
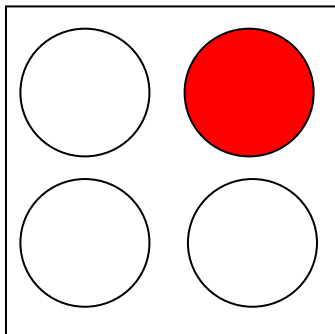
# Fraction:

## Models for one-half and one-fourth

$\frac{1}{2}$



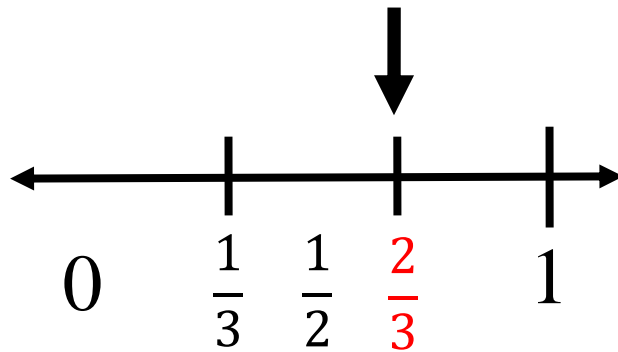
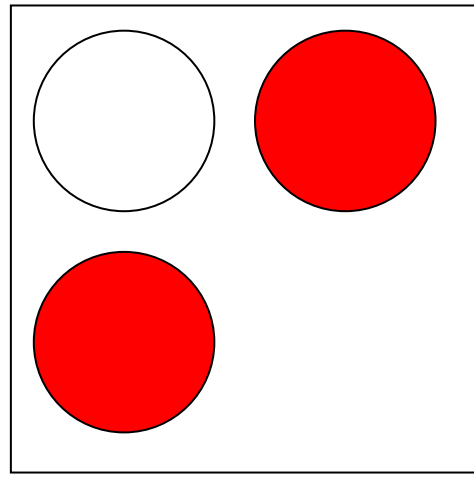
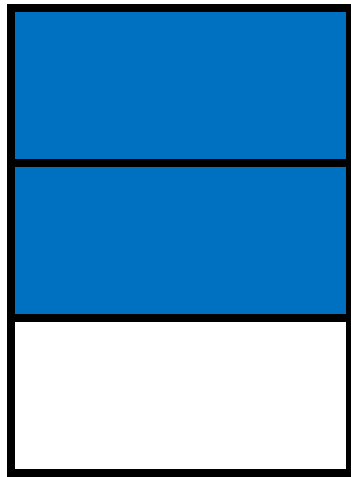
$\frac{1}{4}$



# Fraction:

## Models for two-thirds

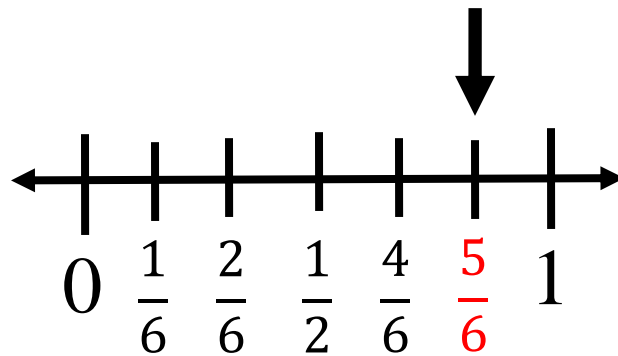
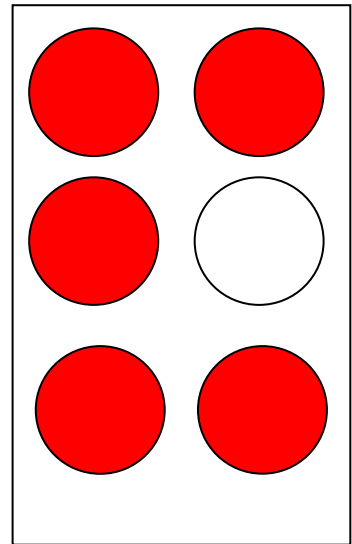
2  
—  
3



# Fraction:

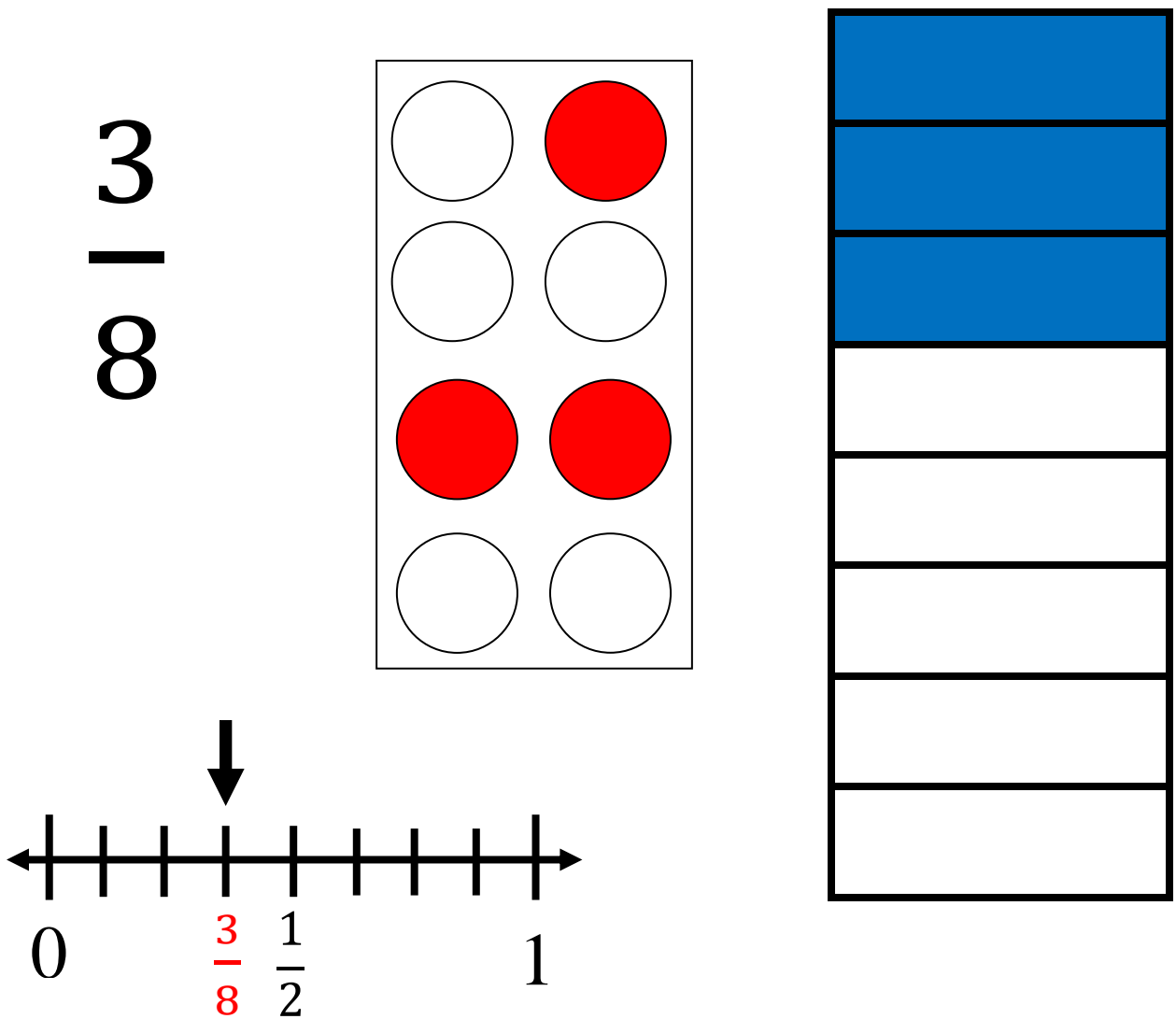
## Models for five-sixths

$\frac{5}{6}$



# Fraction:

## Models for three-eighths



# Numerator/ Denominator

**numerator**      **2**

(number of equal parts being considered)

**3**      **denominator**

(number of equal parts in the whole)

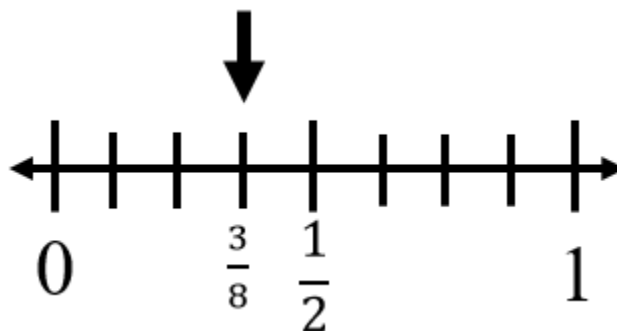
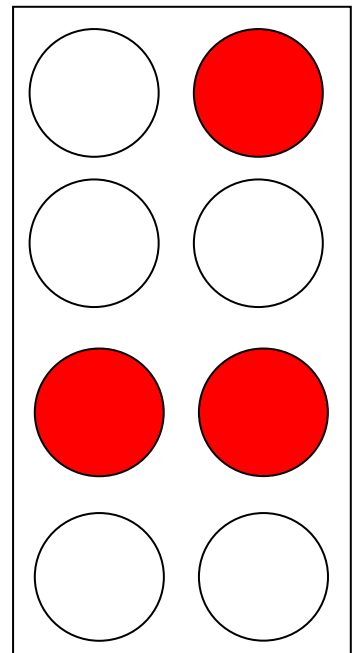
The candy bar was divided into 4 equal parts. Three friends ate 3 pieces of the candy bar, so  $\frac{3}{4}$  of the candy bar has been eaten.



# Proper Fraction:

Fraction less than one  
(numerator is less than the  
denominator)

$$\frac{3}{8}$$

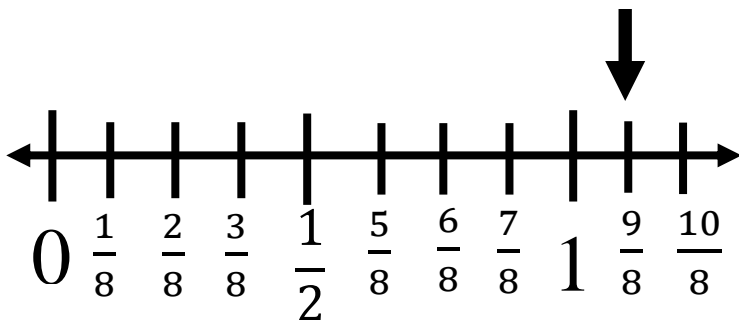
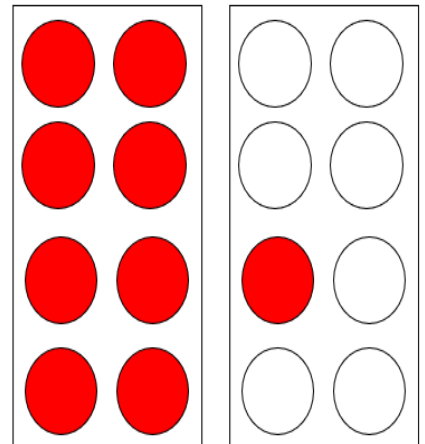
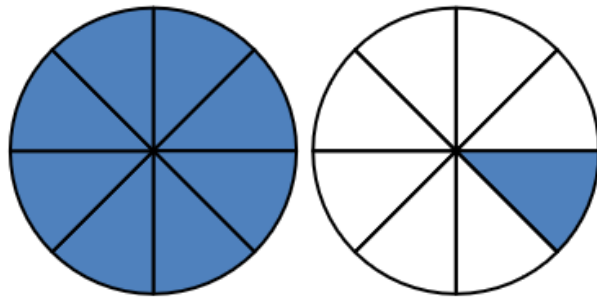


# Improper Fraction:

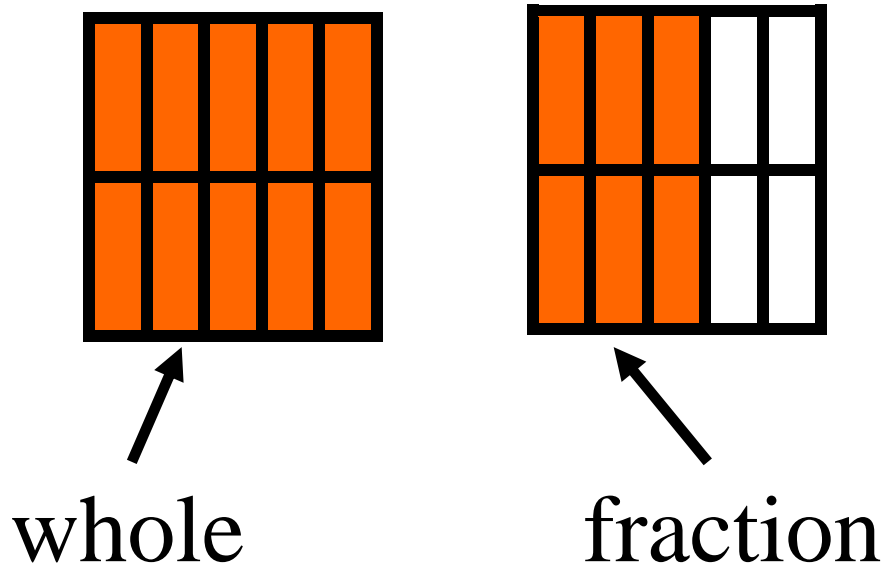
Fraction greater than or  
equal to one

(numerator is equal to or greater  
than the denominator)

$$\frac{9}{8}$$



# Mixed Number



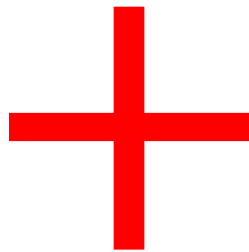
$$1 \frac{6}{10}$$



# Addition

$$465 + 124 = 589$$

sum



plus

# Subtraction

$$465 - 124 = 341$$

difference



minus

# Regroup/ Rename

26 is 1 ten and 16 ones

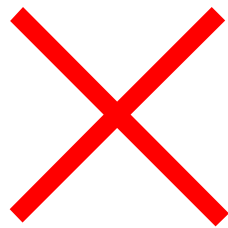
1 ten 16 ones

$$\begin{array}{r} \cancel{26} \\ - \quad 9 \\ \hline 17 \end{array}$$

# Multiply

$$3 \times 4 = 12$$

  
product

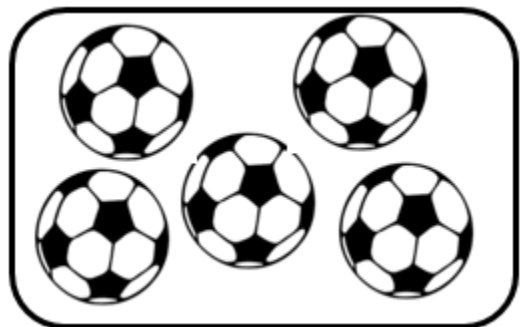
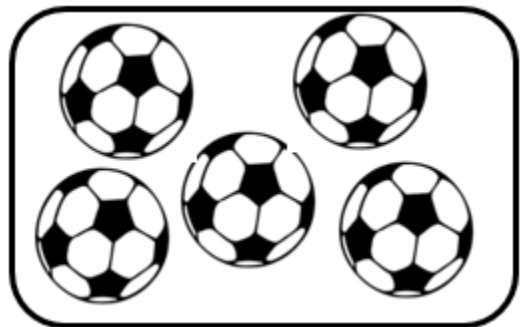


times

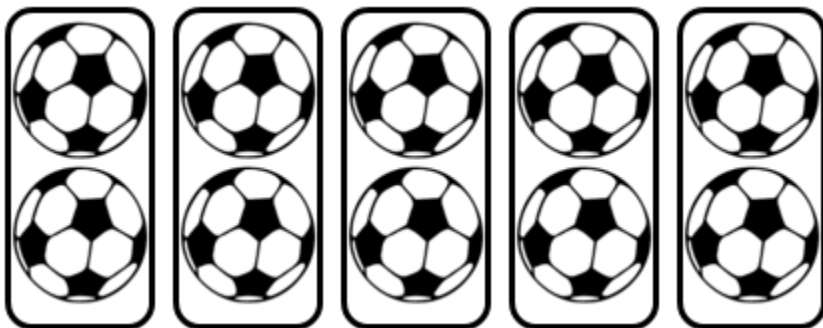
# Multiplication: Set Model

$$2 \times 5$$

2 groups of 5  
soccer balls  
in each group



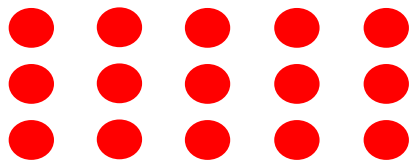
$$5 \times 2$$



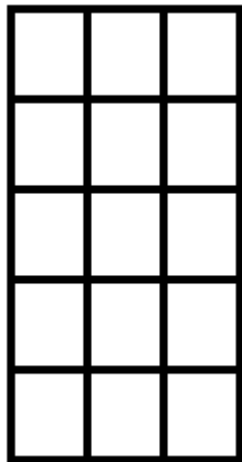
5 groups of 2  
soccer balls  
in each group

# Multiplication: Array Model

(an arrangement of objects in rows and columns)

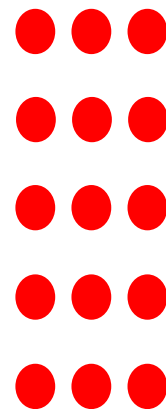


$$3 \times 5$$

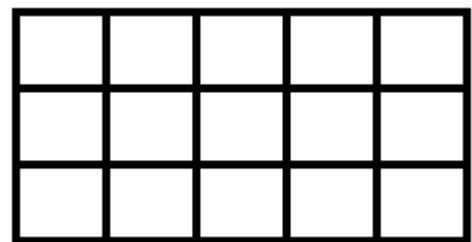


5 rows of 3

$$5 \times 3$$



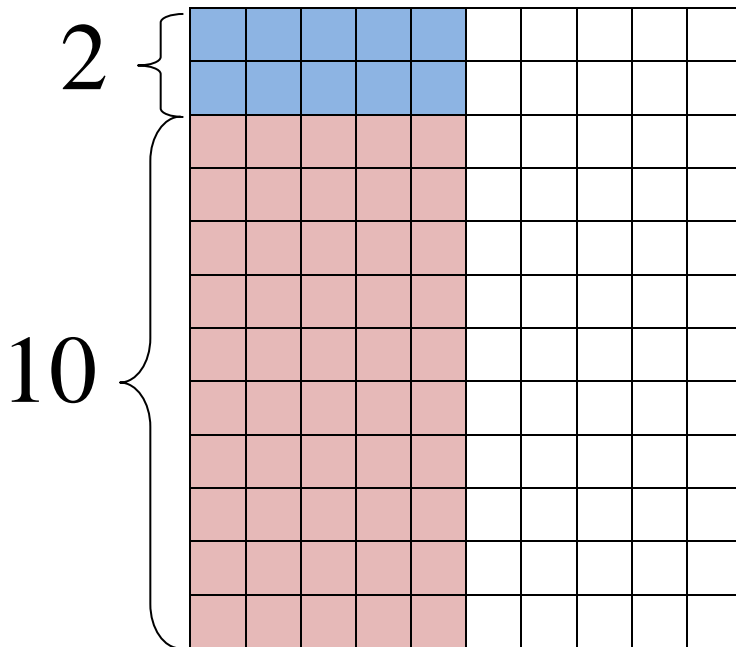
3 rows of 5



# Multiplication: Area (array) Model

$$12 \times 5$$

5



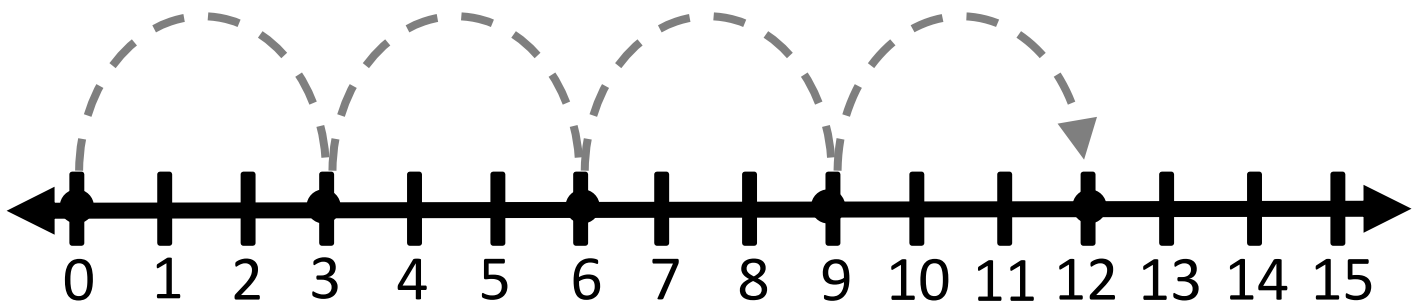
$$\begin{array}{r} 10 \times 5 = 50 \\ + 2 \times 5 = 10 \\ \hline 60 \end{array}$$

$$12 \times 5 = 60$$

# Multiplication: Number Line Model

$$4 \times 3$$

$$4 \times 3 = 12$$



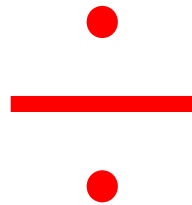


# Divide

$$4 \overline{)12}^3$$

$$12 \div 4 = 3$$

↑  
quotient

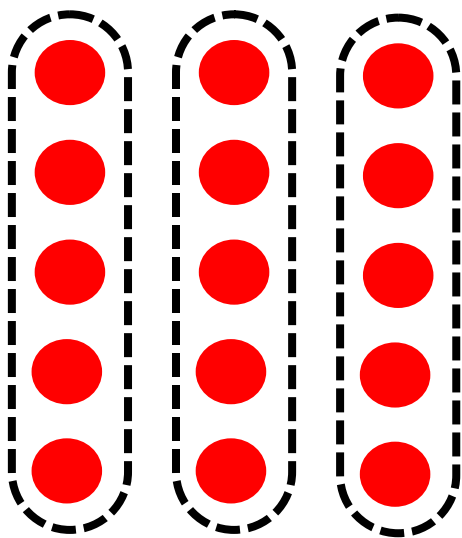
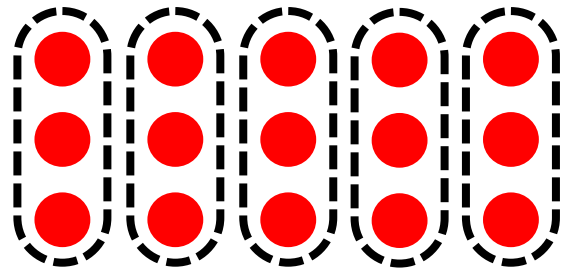


divided by

# Division:

## Array Model

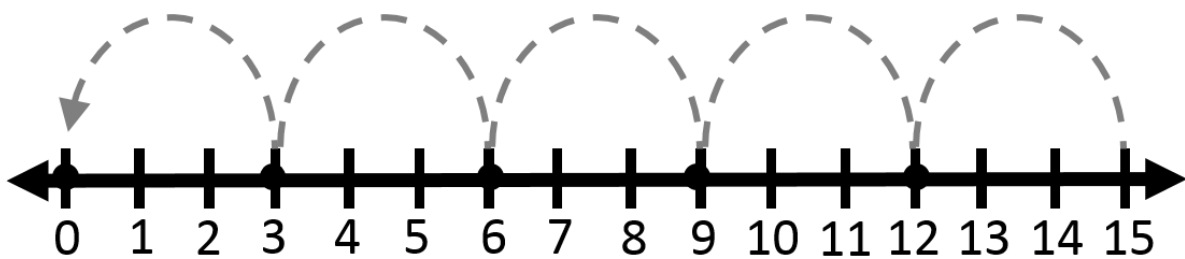
15 candies – if each friend is given 3, there is enough to share with 5 friends



15 candies to be shared among 3 friends means each friend will receive 5 candies

# Division:

## Number Line



$$15 \div 3 = 5$$

The race is 15 miles long. If each team member will run 3 miles, 5 team members will be needed.

# Related Facts:

## Addition /Subtraction

$$5 + 1 = 6$$

$$1 + 5 = 6$$

$$6 - 1 = 5$$

$$6 - 5 = 1$$

# Related Facts: Multiplication/Division

$$2 \times 3 = 6$$

$$3 \times 2 = 6$$

$$6 \div 3 = 2$$

$$6 \div 2 = 3$$

# Equation:

## Number Sentence

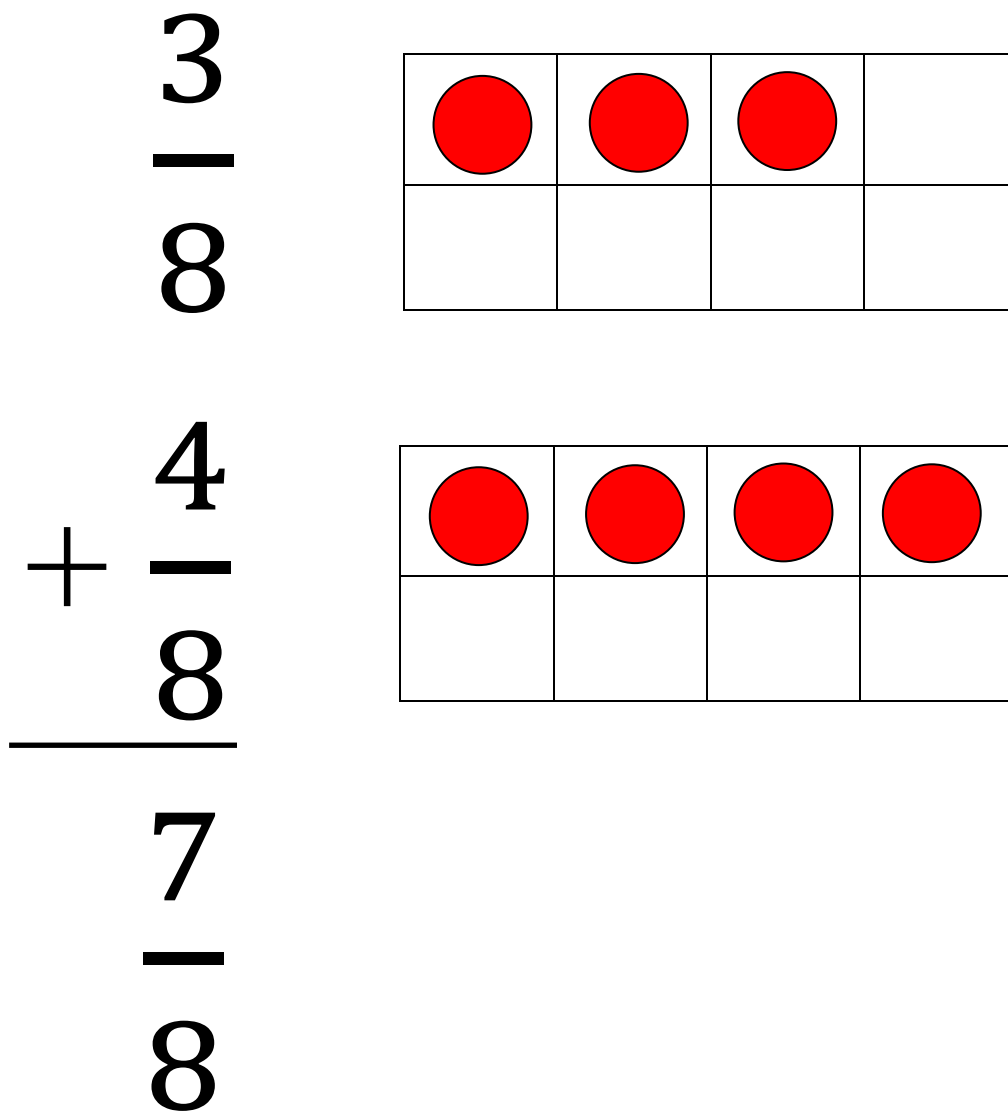
$$8 = 3 + 5$$

$$6 - 2 = 4$$

$$17 + 13 + 9 = 39$$

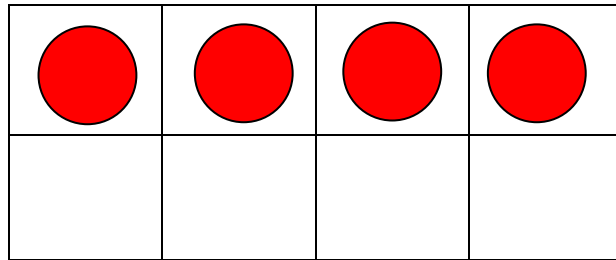
$$4 \times 3 = 14 - 2$$

# Fraction: Addition

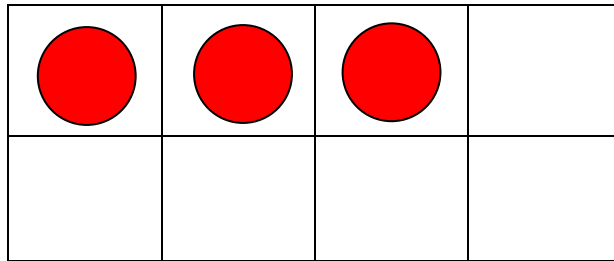


# Fraction: Subtraction

4  
—  
8



— 3  
— 8  
—  
1  
—  
8





# Penny



1¢

one cent

\$0.01

# Nickel



5¢

five cents

\$0.05

# Dime



10¢

ten cents

\$0.10

# Quarter



25¢

twenty-five cents

\$0.25

# Dollar



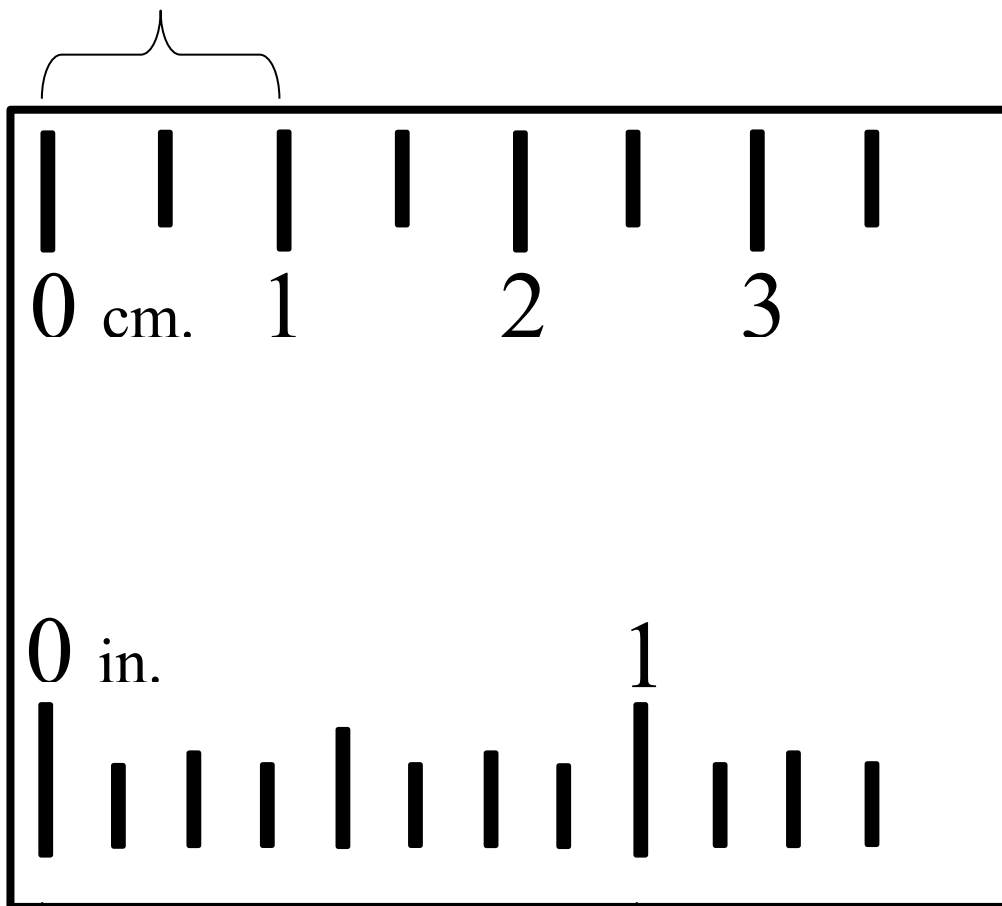
\$1.00

One hundred cents

# Ruler:

## Centimeter and Inch

one centimeter

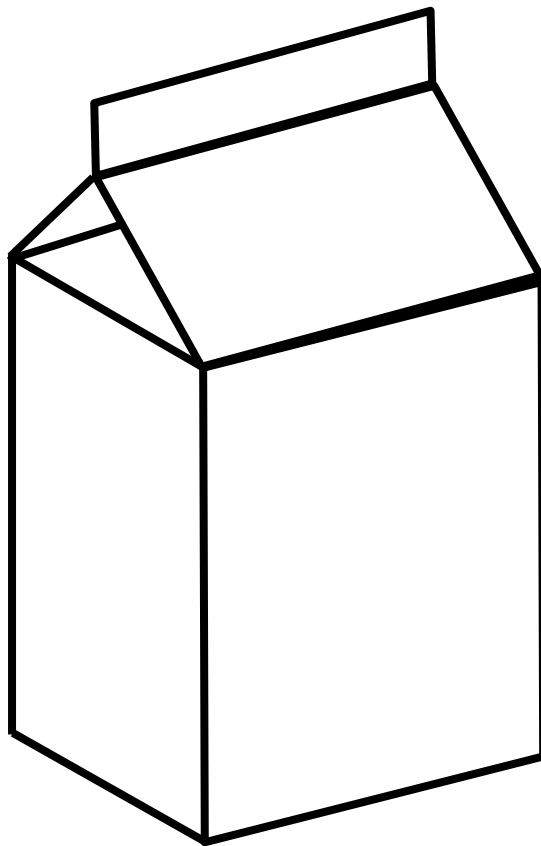


one inch

# Cup

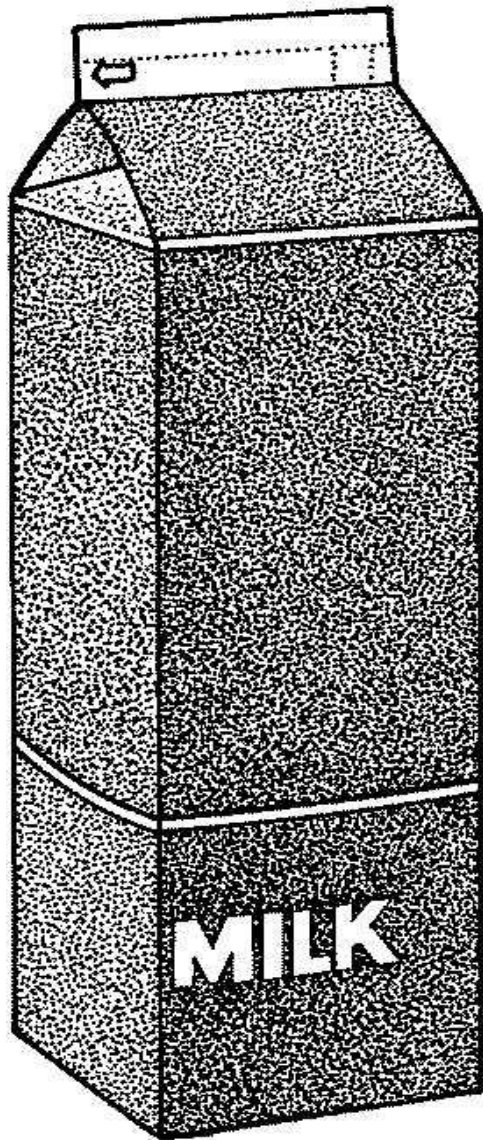


# Pint





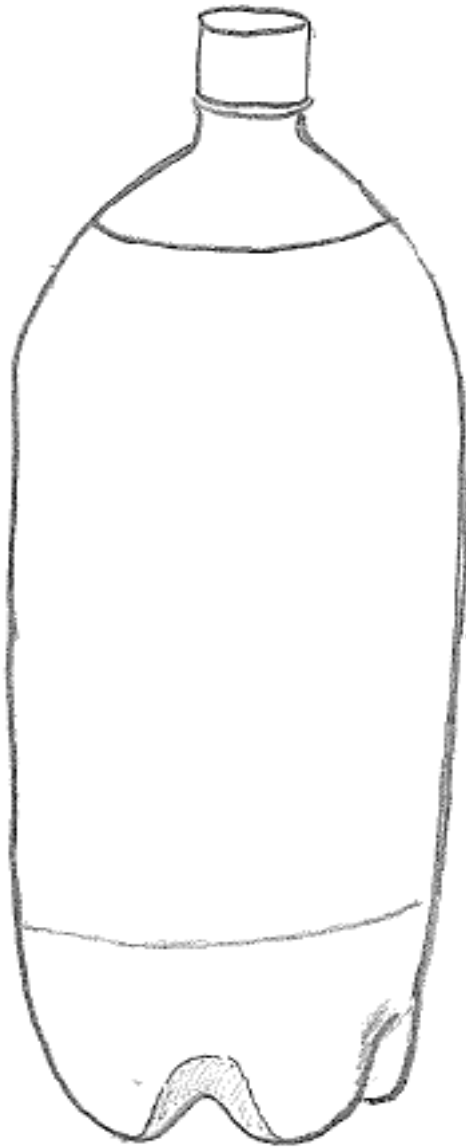
# Quart



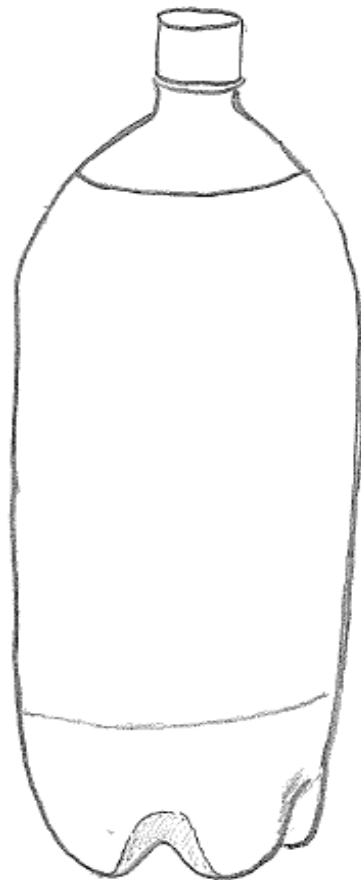
# Gallon



# Liter



2 liters



1 liter

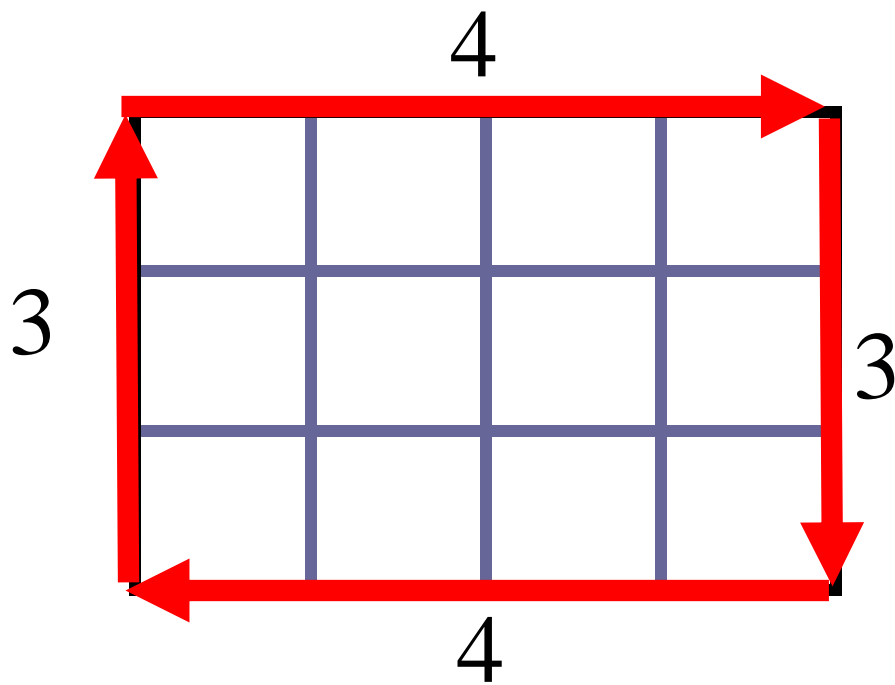
# Area:

## Square Units

1	2	3	4
5	6	7	8
9	10	11	12

12 square units

# Perimeter: Units



$$3 + 4 + 3 + 4$$

14 units

# Clock:

Minutes, One-half Hour,  
One Hour



digital



analog

30 minutes = one-half hour

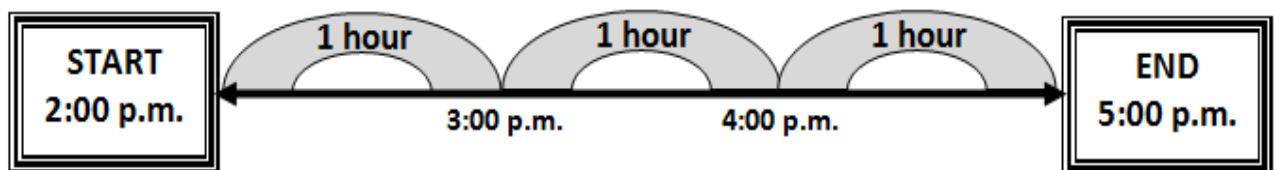
60 minutes = 1 hour

24 hours = 1 day

# Elapsed Time

amount of time that has passed between two given times

The movie starts at 2:00 p.m. and ends at 5:00 p.m.



The movie is three hours long.

# Calendar

NOVEMBER						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

24 hours = 1 day

7 days = 1 week

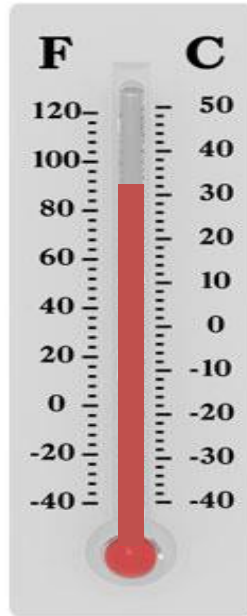
About 30 days = 1 month

$365\frac{1}{4}$  days = 1 year

12 months = 1 year



# Thermometer



temperature

degrees °

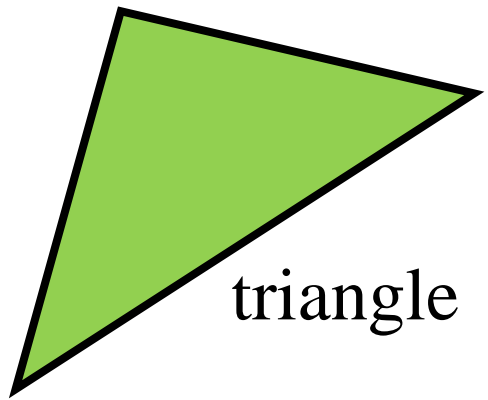
Fahrenheit

Celsius

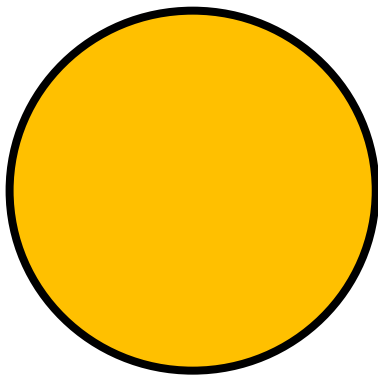
# Plane Figures



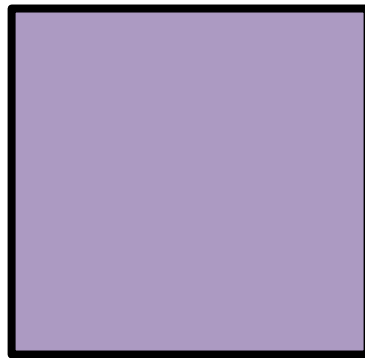
rectangle



triangle



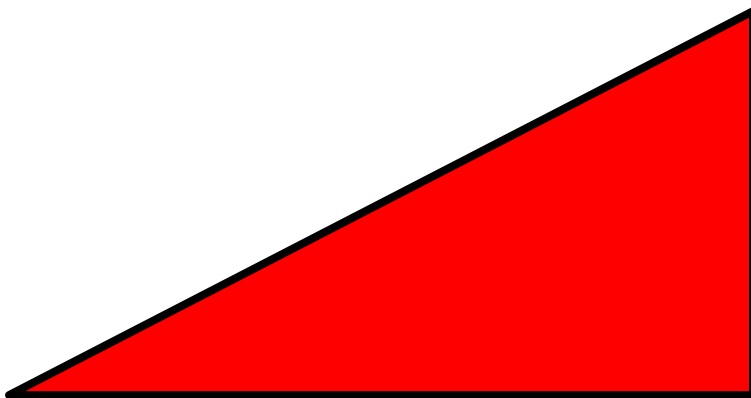
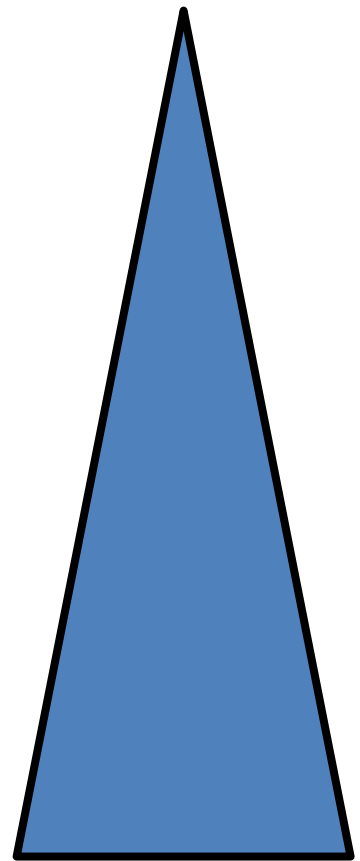
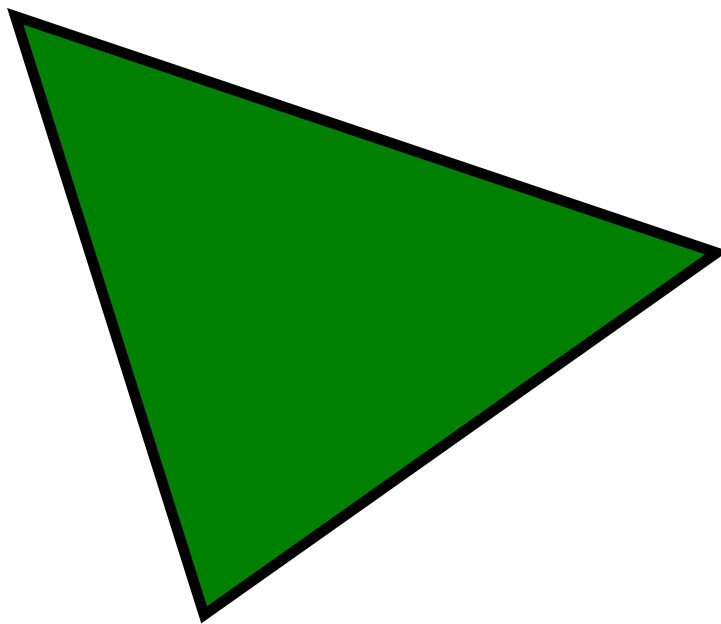
circle



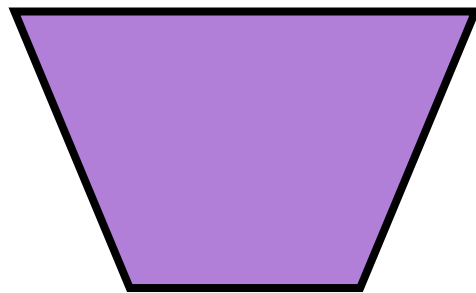
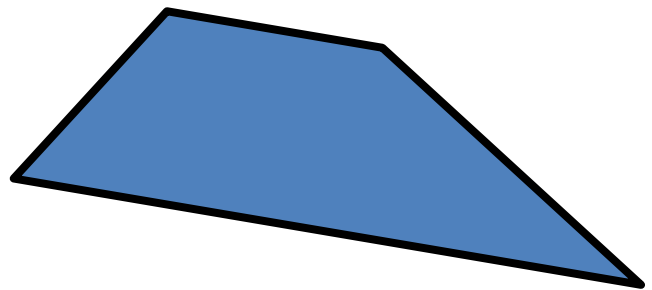
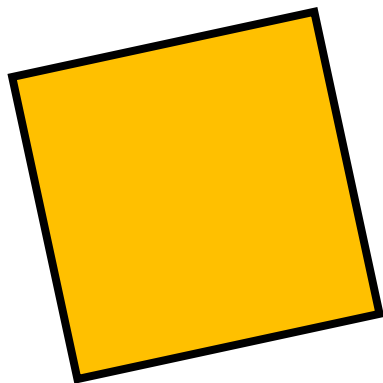
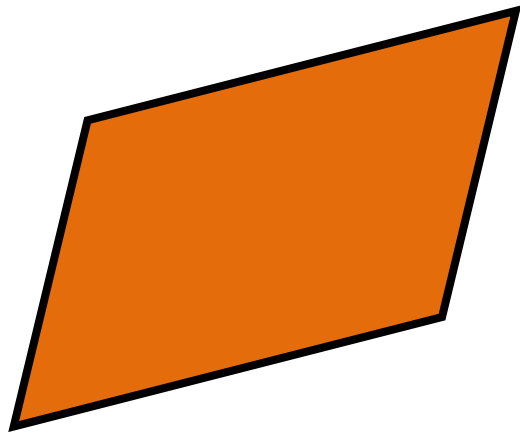
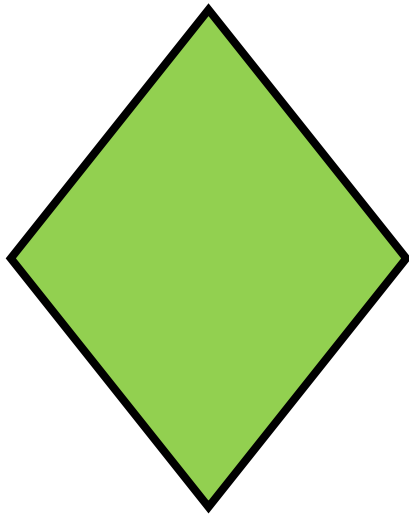
square

# Polygons:

## Triangles



# Polygons: Quadrilaterals



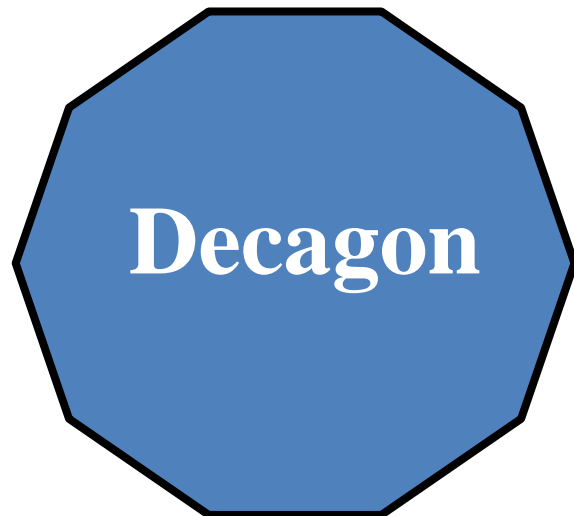
# Polygons:

## Pentagon, Hexagon, Heptagon, and Octagon

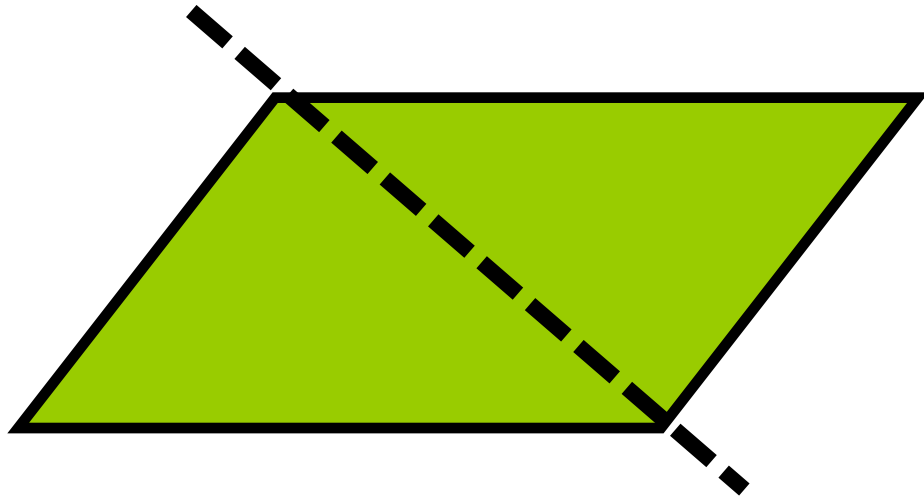


# Polygons:

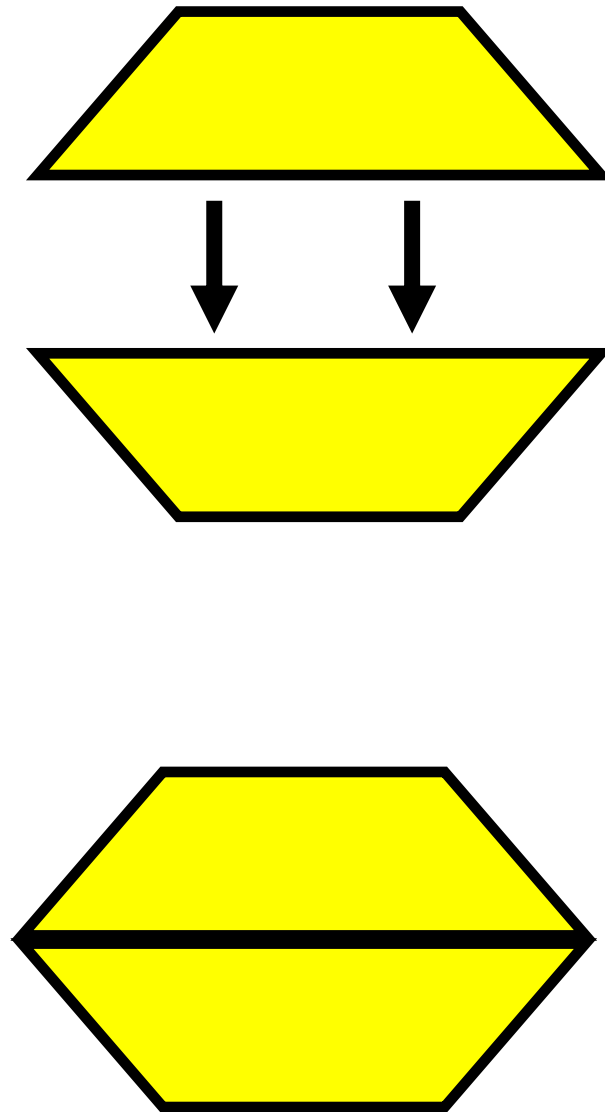
## Nonagon and Decagon



# Subdivide



# Combine





# Rectangle:

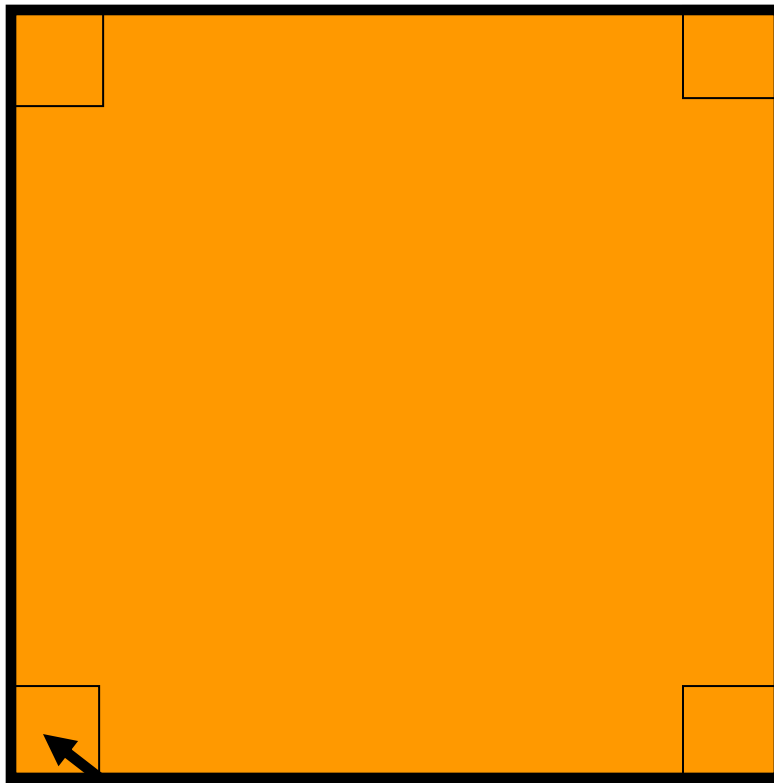
## Right Angle



right angle

# Square:

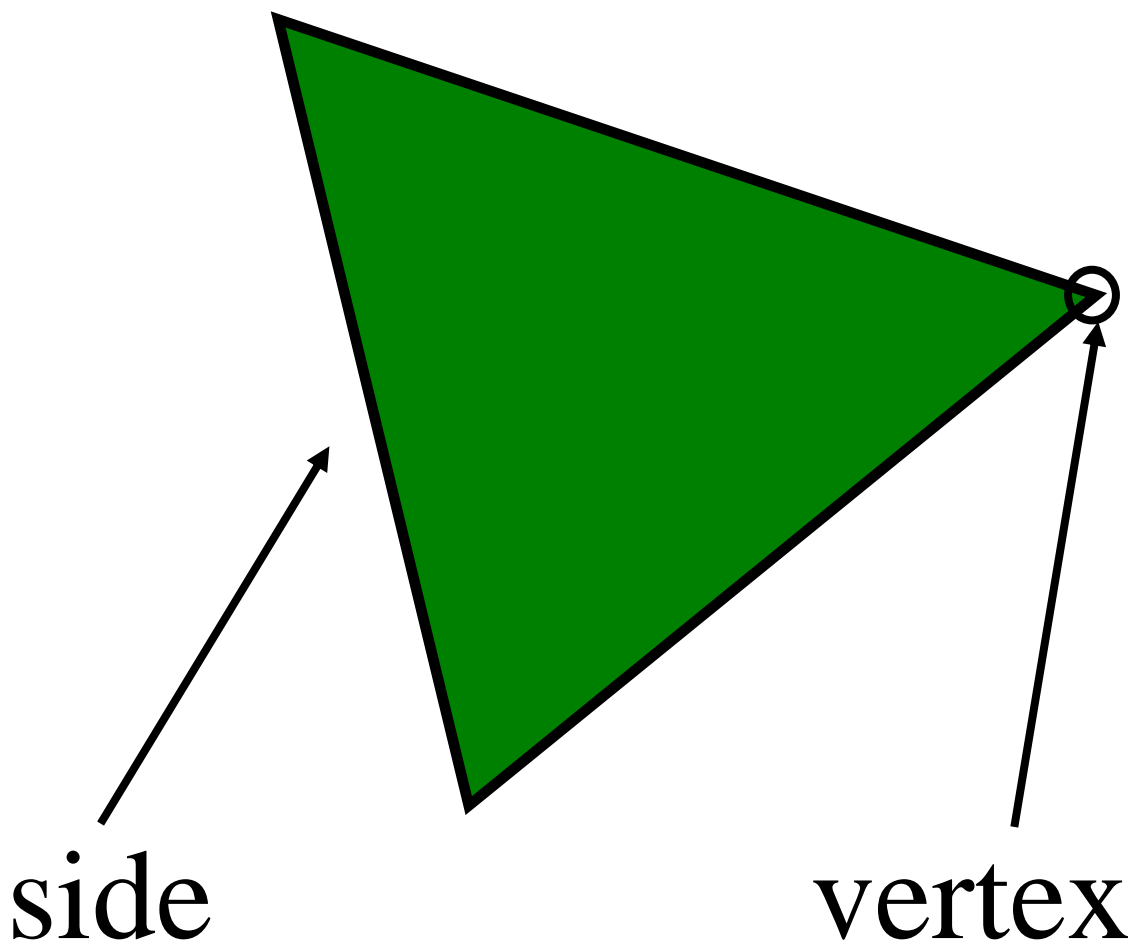
## Right Angle



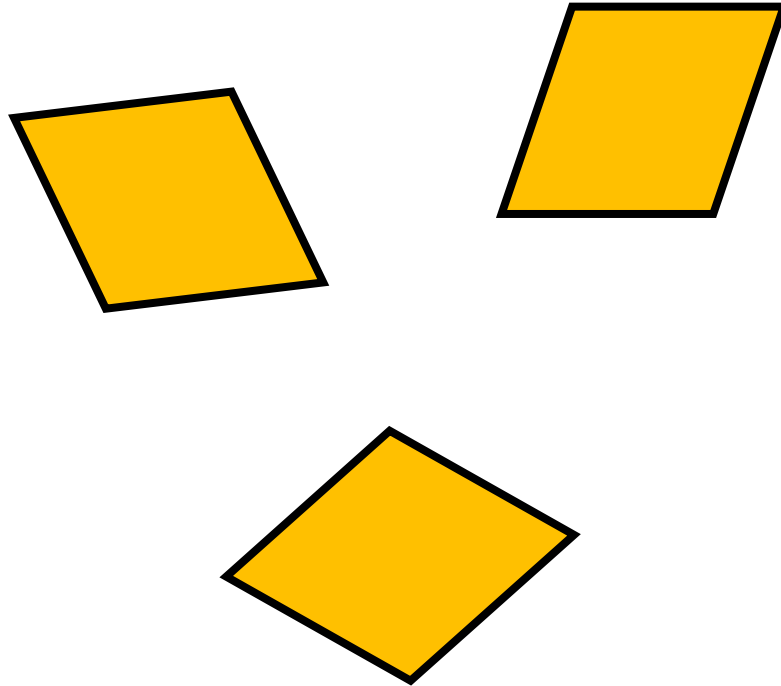
right angle

# Triangle:

## Side and Vertex

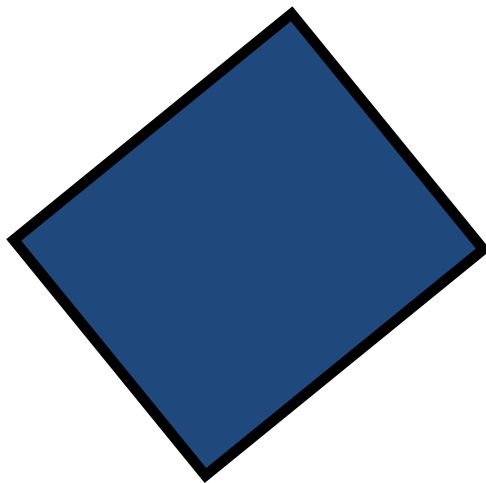
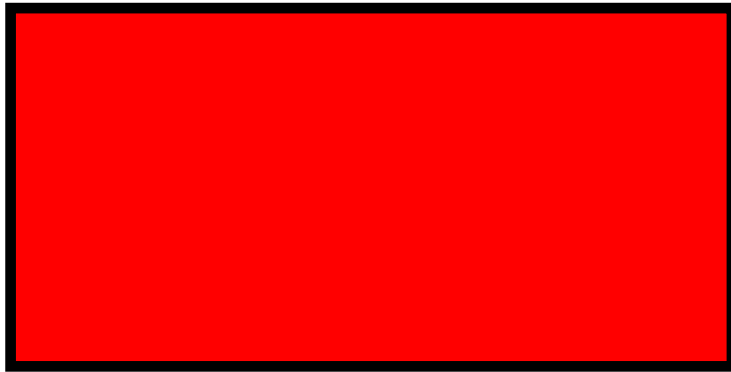


# Congruent



same shape and size

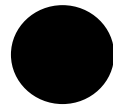
# Noncongruent



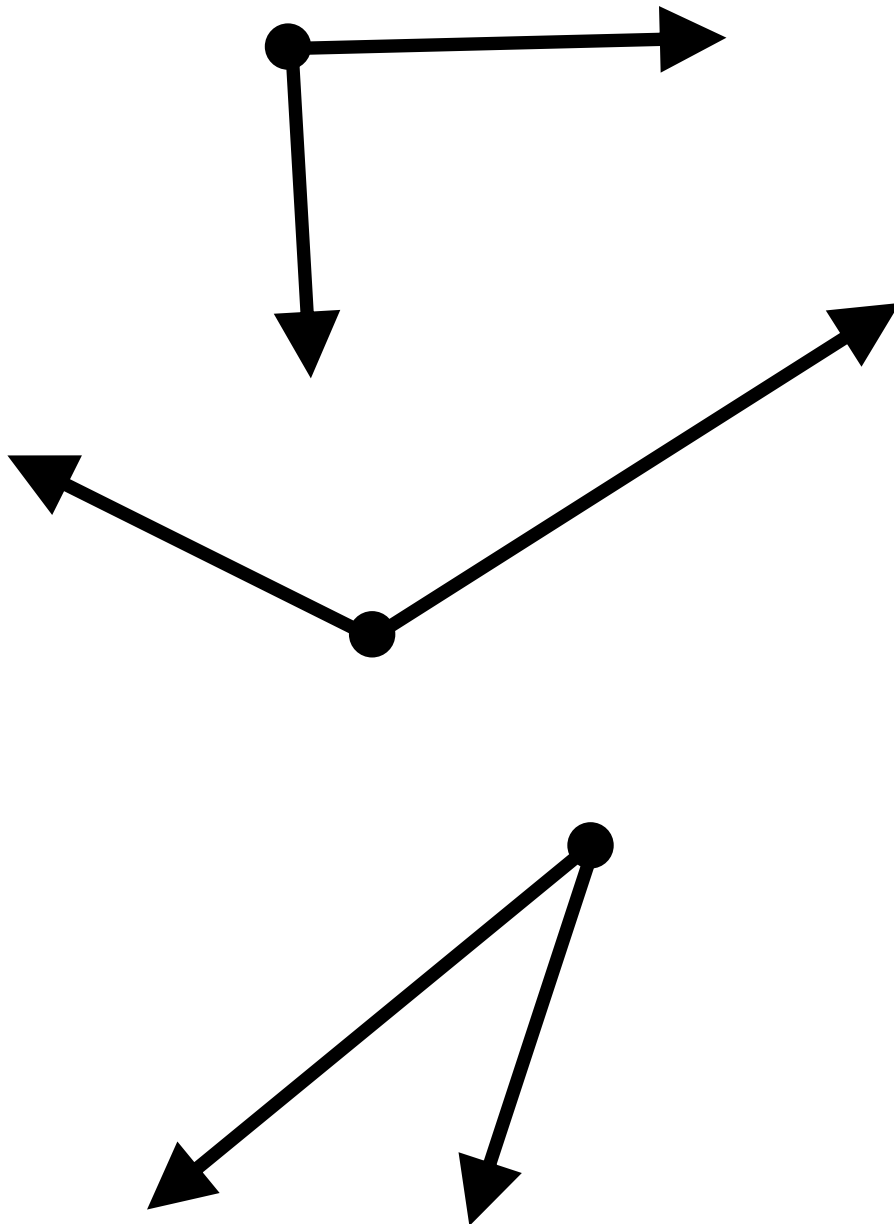
# Line Segment



# Point

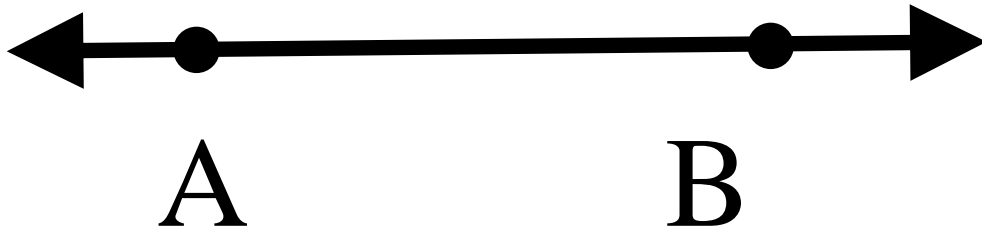


# Angle

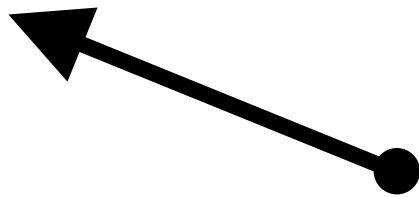




# Line

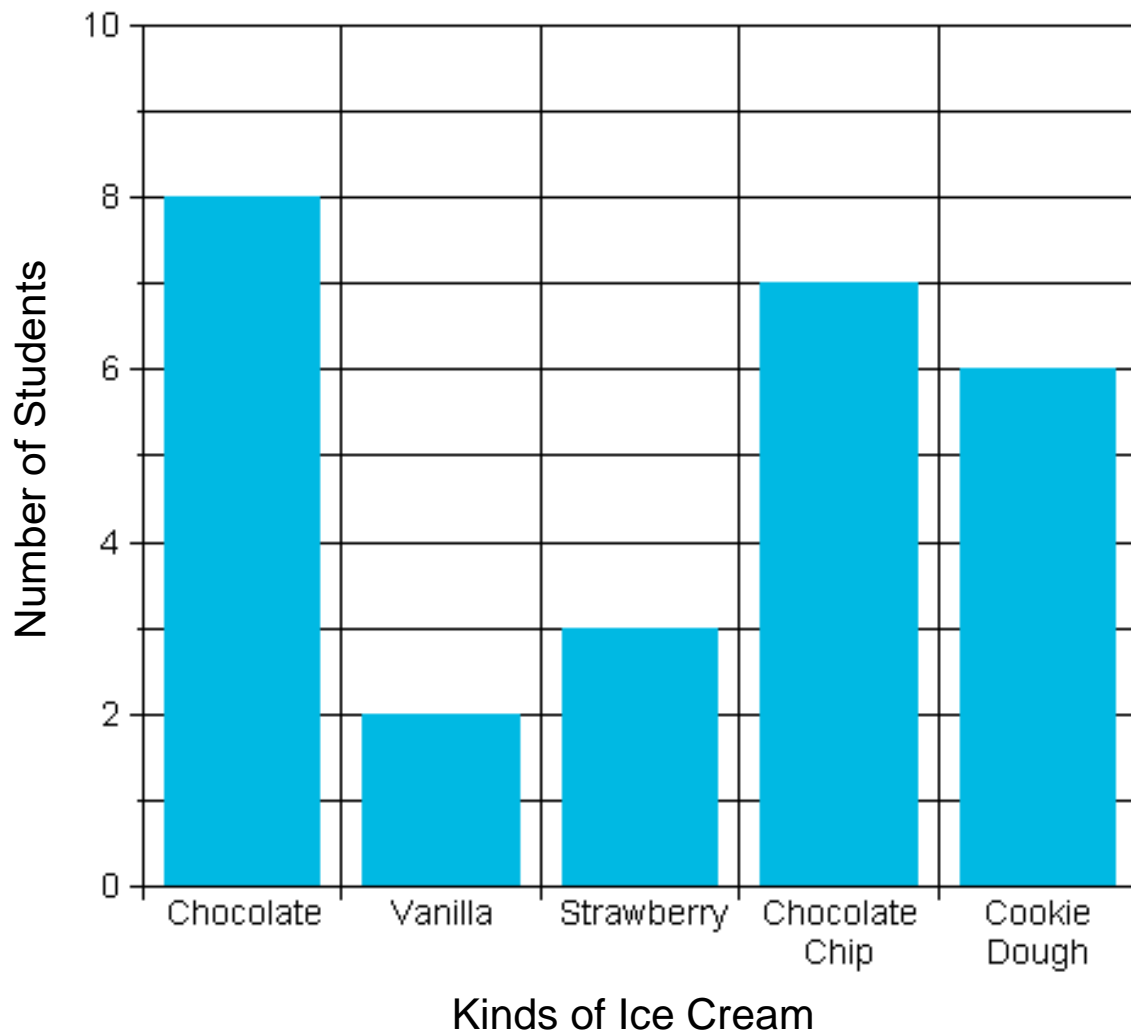


# Ray



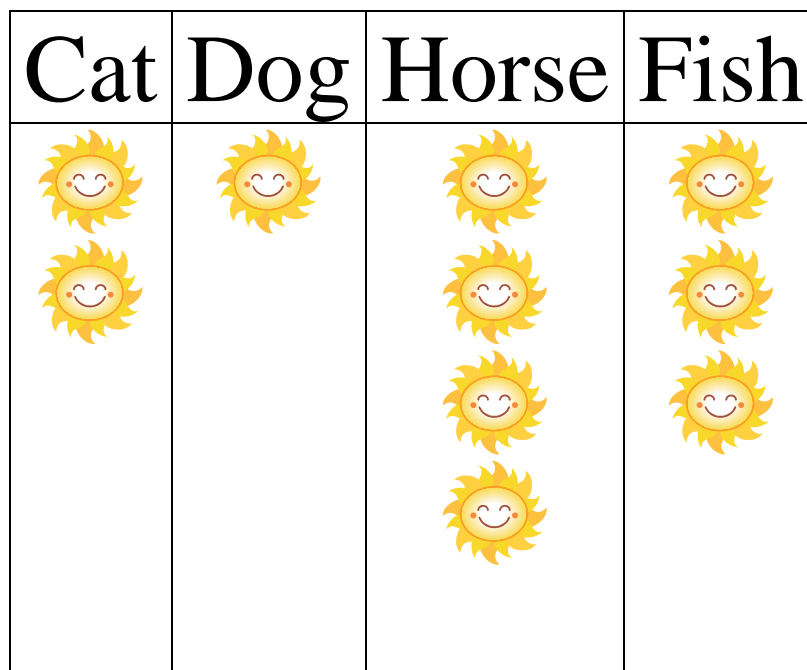
# Bar Graph

Our Favorite Ice Cream



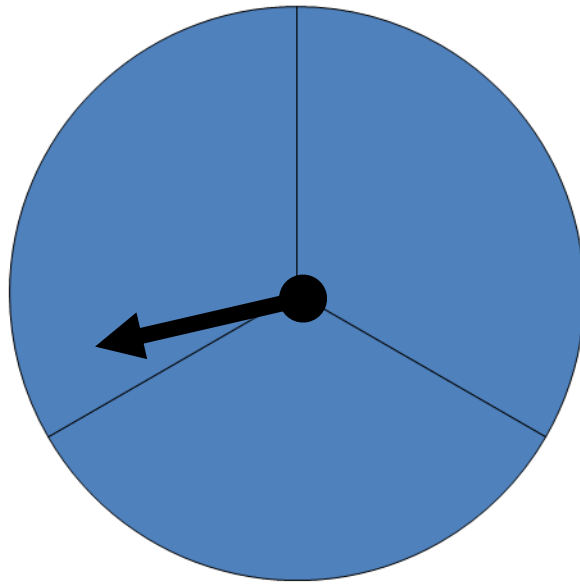
# Pictograph

## Our Favorite Pets



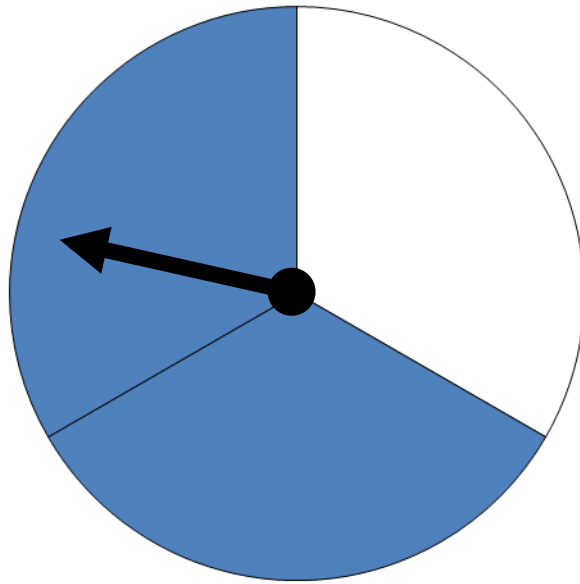
 = 2 students

# Certain



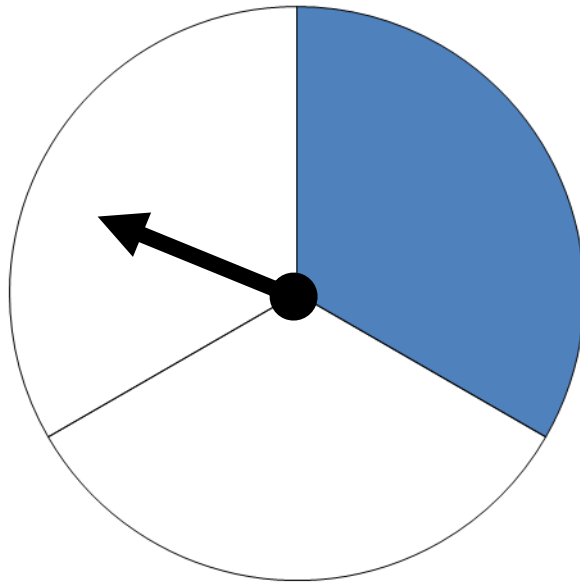
is certain

# Likely



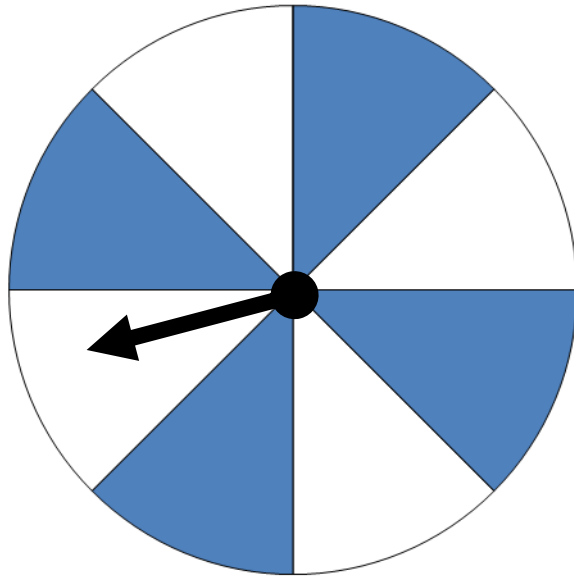
 is likely

# Unlikely



 is unlikely

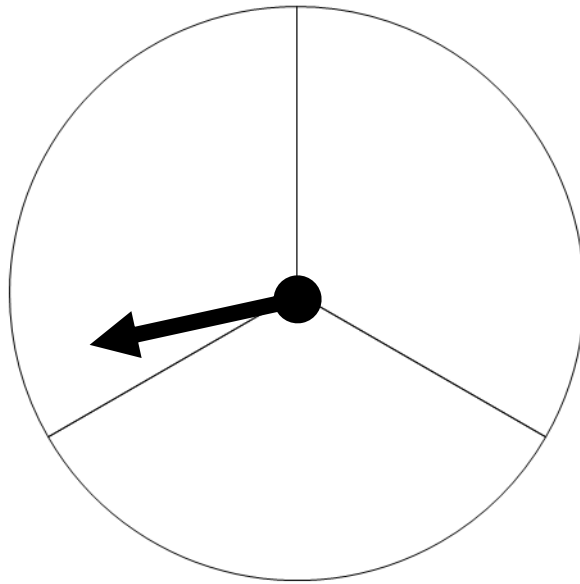
# Equally Likely



 and  are equally likely



# Impossible



 is impossible

# Equal

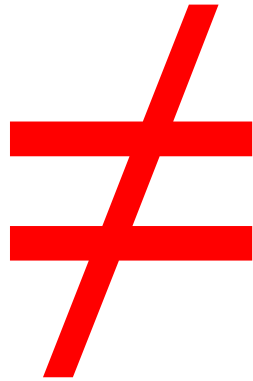


$$2 + 9 = 9 + 2$$

$$13 - 4 = 12 - 3$$

$$3 \times 4 = 1 \times 12$$

# Not Equal



$$5 + 6 \neq 4 + 8$$

$$9 - 4 \neq 3 \times 3$$

$$5 \times 7 \neq 35 + 5$$

# Pattern:

## Growing patterns and Input/Output table



3, 5, 7, 9, \_\_, 13, \_

Rule: Add 4

Input	Output
4	8
5	9
8	—
9	—

# Expression

a representation of a  
quantity

5

$4 + 3$

$8 - 2$

$2 \times 7$

# Calculator

