Grade 4 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.**

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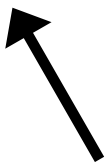
Place Value Position

Hundred Millions	Ten Millions	One Millions		Hundred Thousands	Ten Thousands	One Thousands		Hundreds	Tens	Ones
7	9	1	,	2	3	5	,	4	8	6

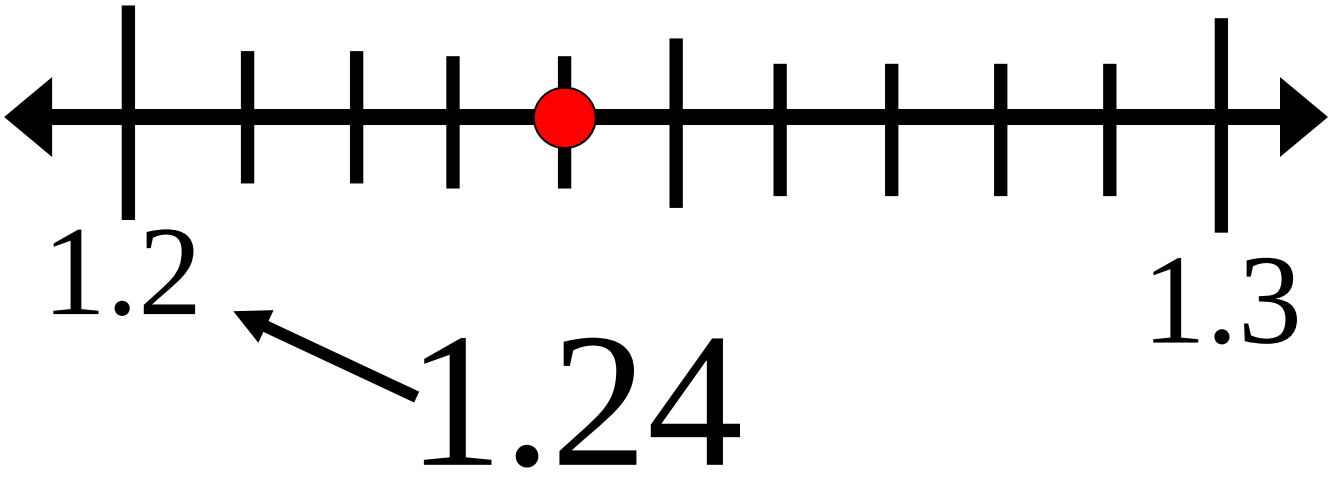
Decimal Place Value Position

Ones		Tenths	Hundredths	Thousandths
3	.	7	2	1



decimal point

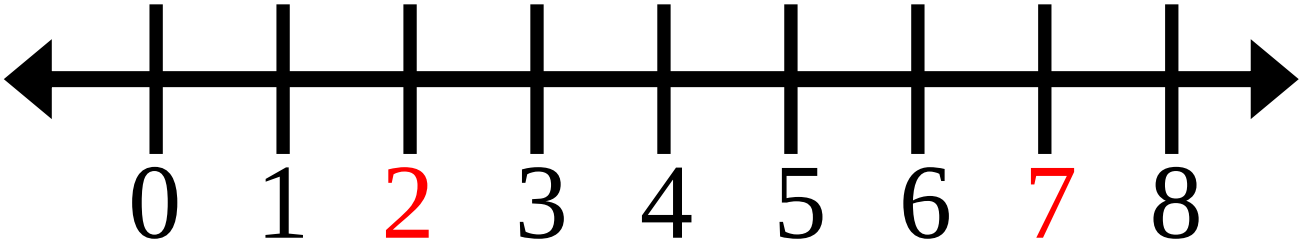
Round



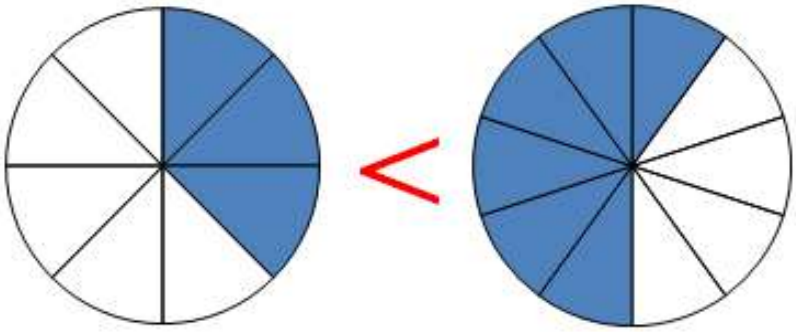
Round 1.24 to the nearest tenth.

Less than

<



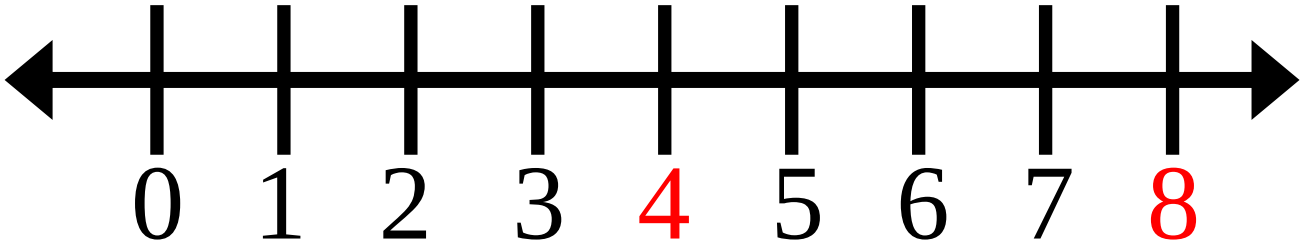
$2 < 7$



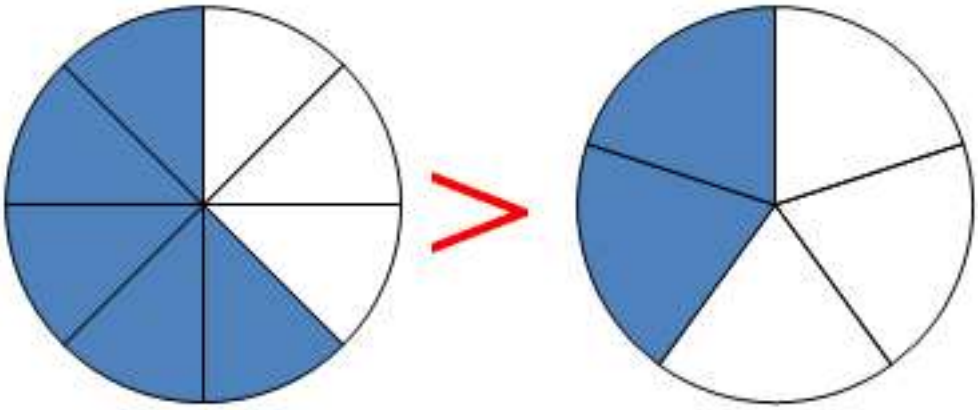
$\frac{3}{8} < \frac{6}{10}$

Greater than

>



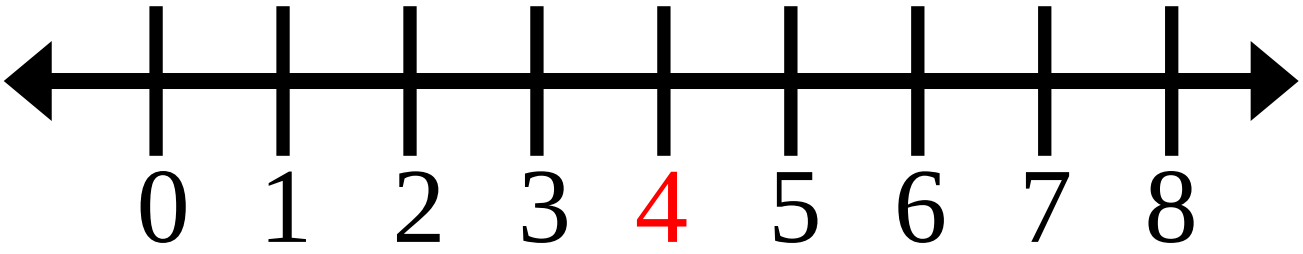
$8 > 4$



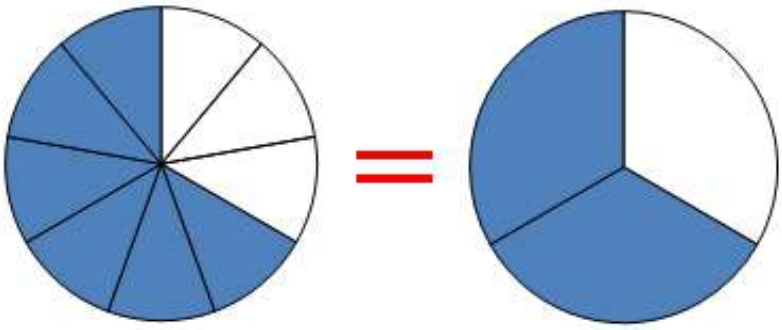
$\frac{5}{8} > \frac{2}{5}$

Equal to

=



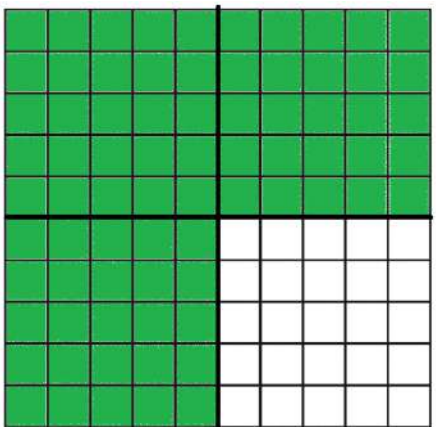
$4 = 4$



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

Equivalent

$$\frac{75}{100} = \frac{3}{4}$$



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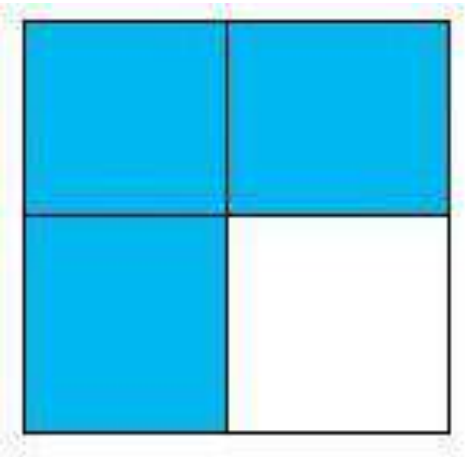
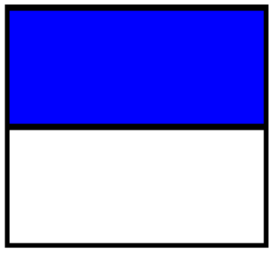


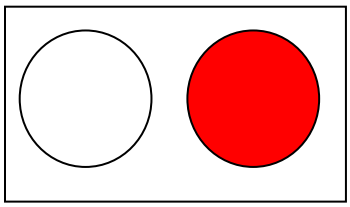
$$0.75 = \frac{3}{4}$$

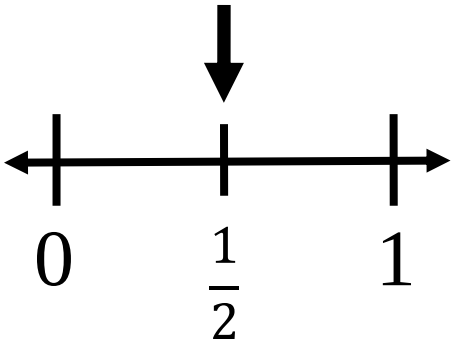
Fraction:

Models for one-half and one-fourth

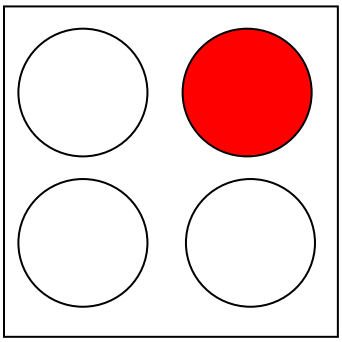
$\frac{1}{2}$

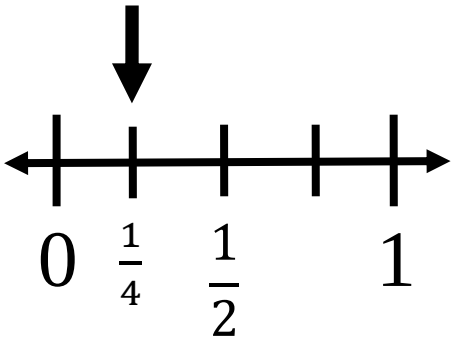






$\frac{1}{4}$

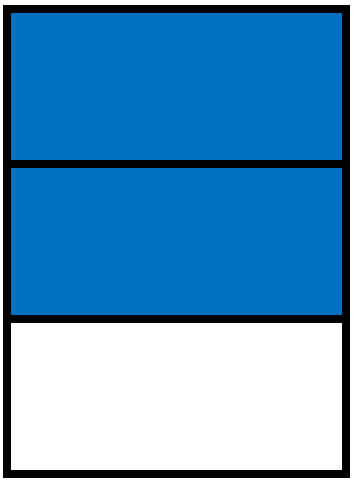


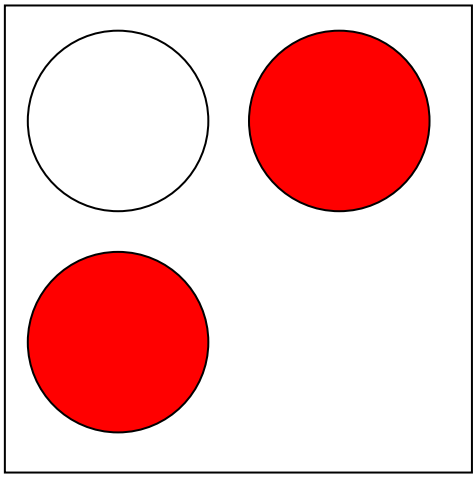


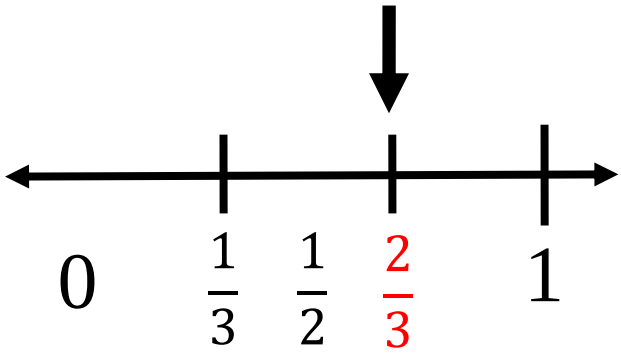
Fraction:

Models for two-thirds

$\frac{2}{3}$



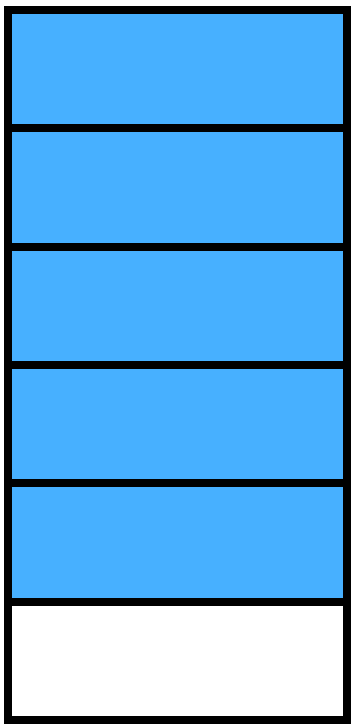


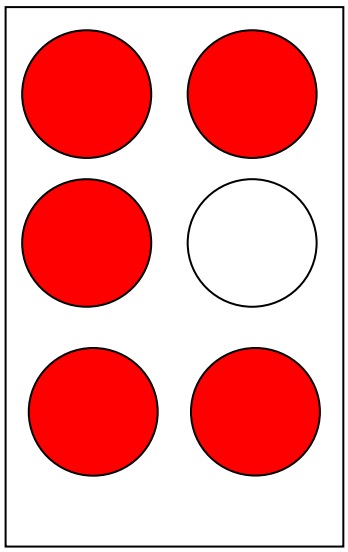


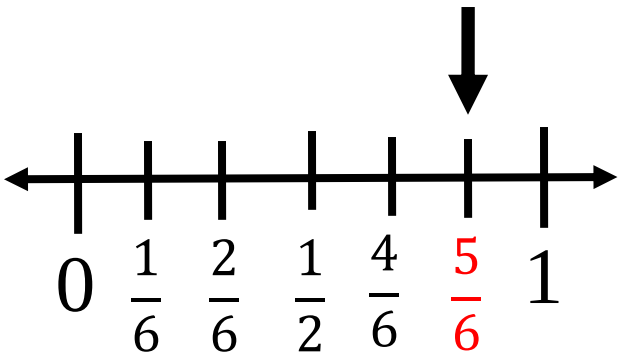
Fraction:

Models for five-sixths

$\frac{5}{6}$



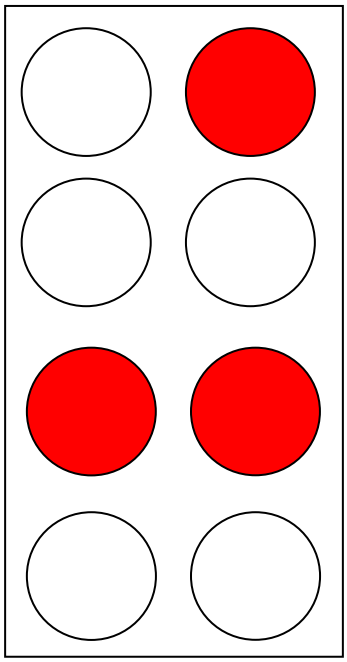


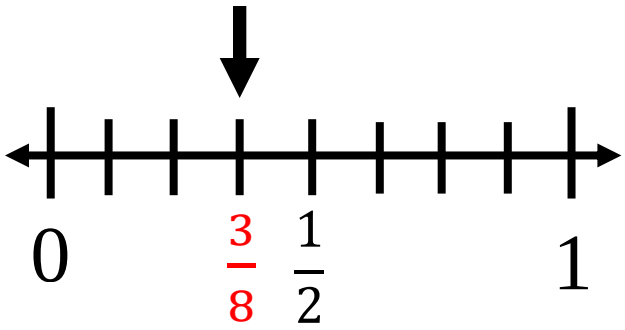


Fraction:

Models for three-eighths

$\frac{3}{8}$





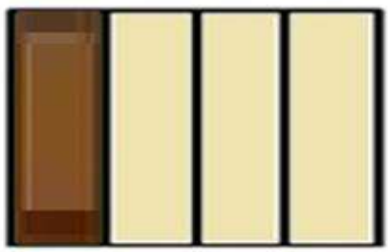
Numerator/ Denominator

numerator
(number of equal parts being considered)

$\frac{2}{3}$

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.

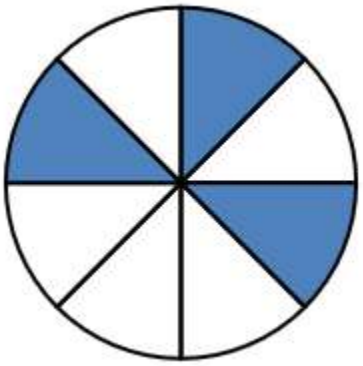


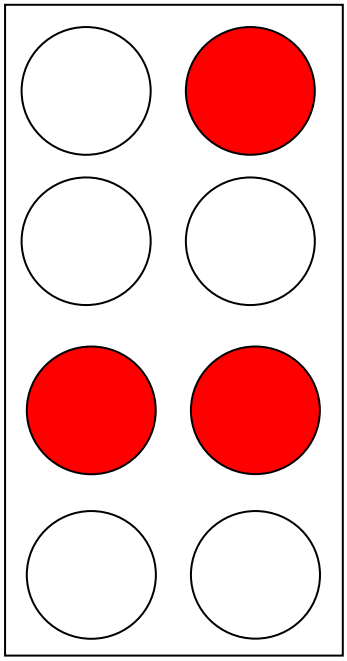
Proper Fraction:

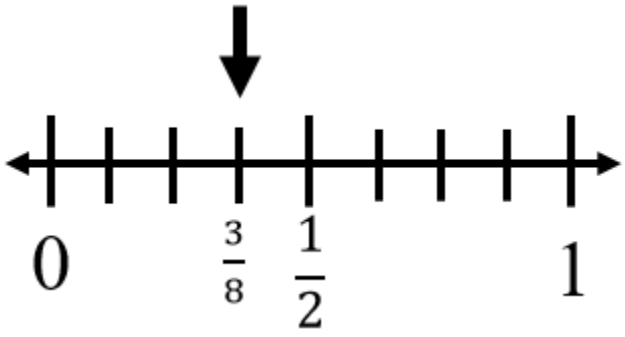
Fraction less than one

(numerator is less than the denominator)

$\frac{3}{8}$





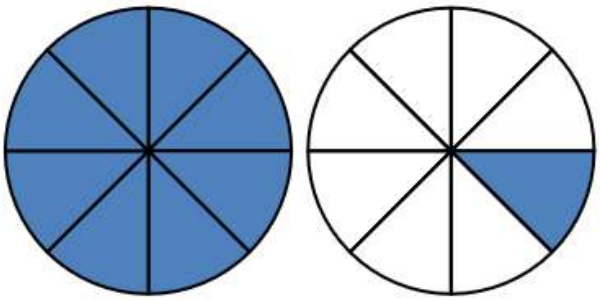


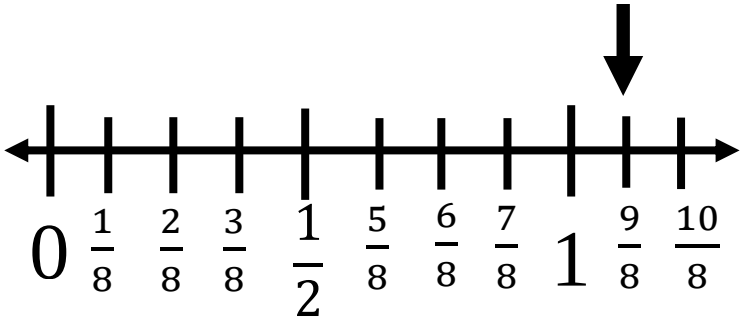
Improper Fraction:

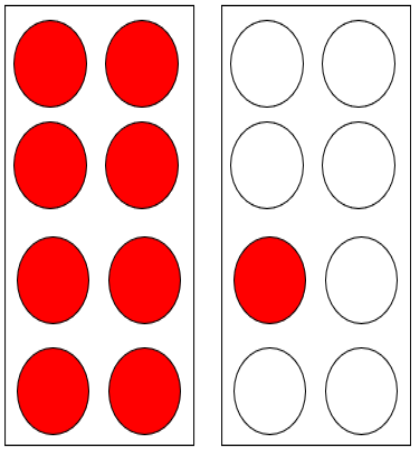
Fraction greater than or equal to one

(numerator is equal to or greater than the denominator)

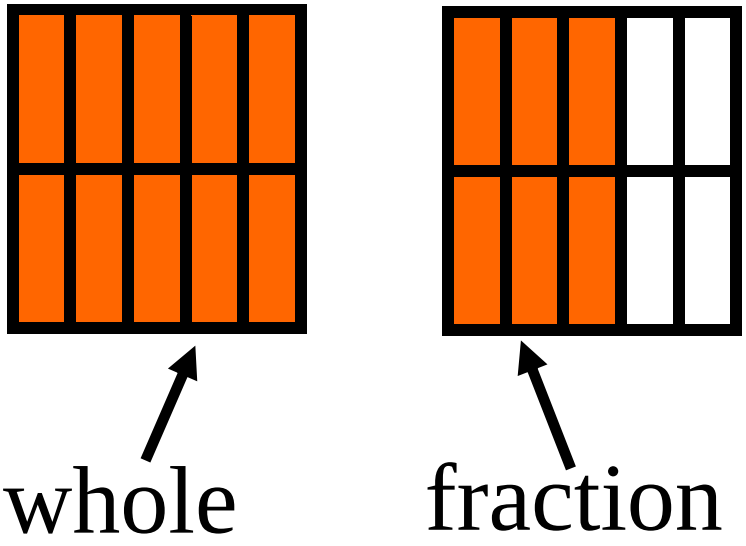
$\frac{9}{8}$







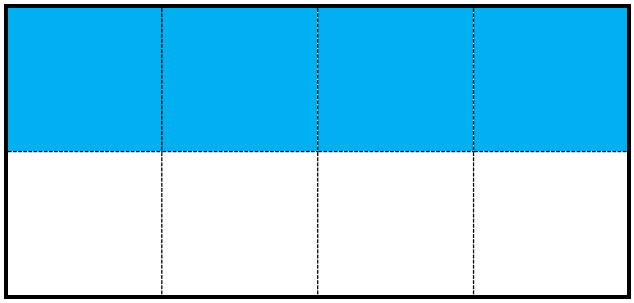
Mixed Number

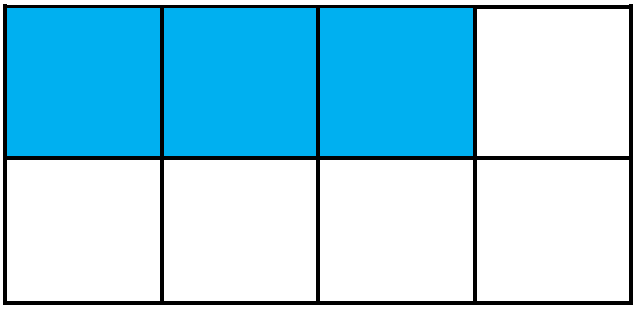


$$1\frac{6}{10}$$

Fraction: Addition

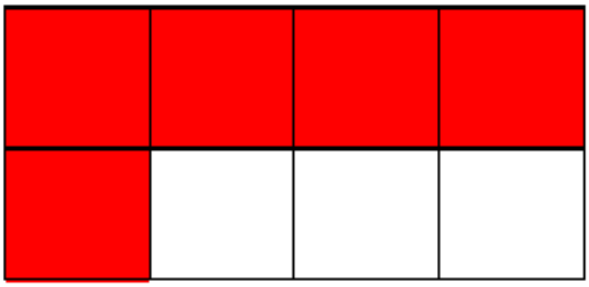
$$\frac{1}{2} + \frac{3}{8} = \frac{7}{8}$$

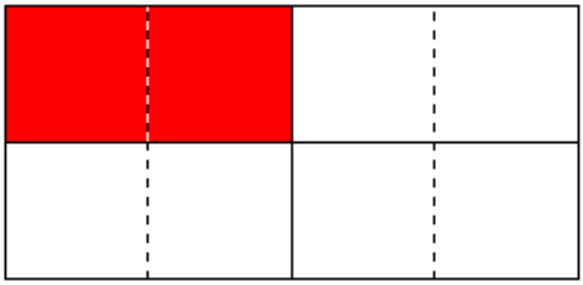




Fraction: Subtraction

$$\frac{5}{8} - \frac{1}{4} = \frac{3}{8}$$





Multiple

Multiples of 5

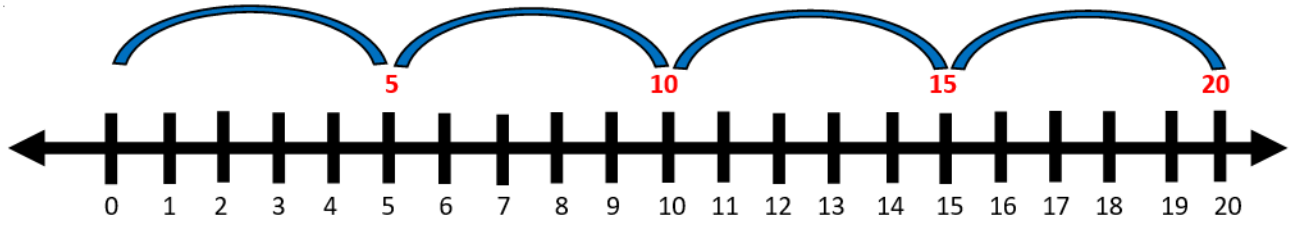
$1 \times 5 = 5$

$2 \times 5 = 10$

$3 \times 5 = 15$

$4 \times 5 = 20$

5, 10, 15, 20, …



Least Common Multiple

Multiples of 12	Multiples of 18
1 x 12 = 12	1 x 18 = 18
2 x 12 = 24	2 x 18 = 36
3 x 12 = 36	3 x 18 = 54
4 x 12 = 48	

LCM is 36.

Factor

Factors of 12

1, 2, 3, 4, 6, 12

1 x 12

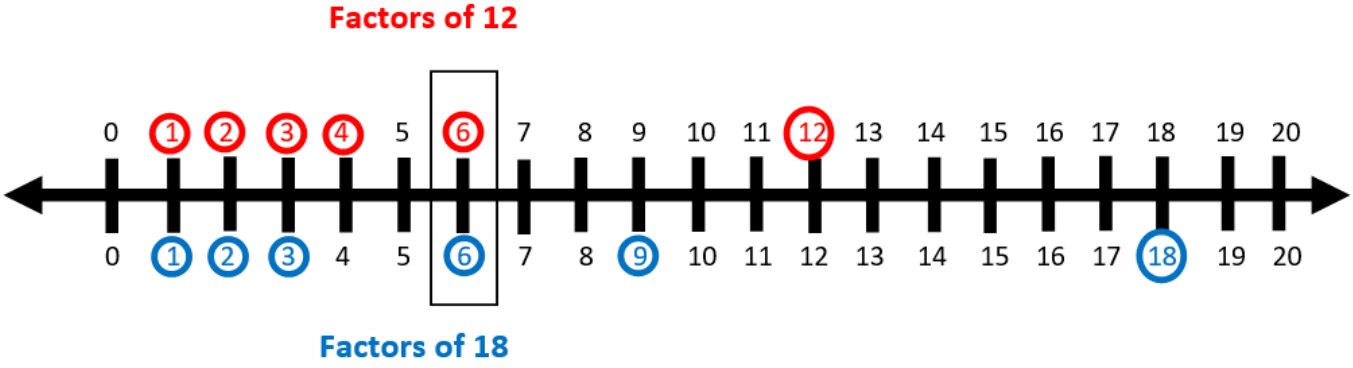
2 x 6

3 x 4

Greatest Common Factor

Factors of 12	Factors of 18
1 x 12 = 12	1 x 18 = 18
2 x 6 = 12	2 x 9 = 18
3 x 4 = 12	3 x 6 = 18
1, 2, 3, 4, 6, 12	1, 2, 3, 6, 9, 18

GCF is 6.



Addition

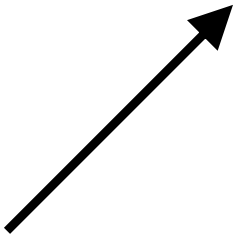
$4.65 + 1.74 = 6.39$

+

plus

Subtraction

$4.25 - 1.64 = 2.61$



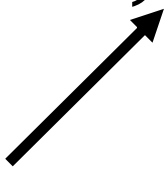
difference

minus

Multiply:

Product

32 x 48 = 1,536



product

X

Divide:

Quotient

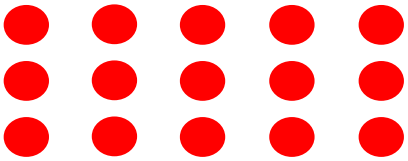
$$14\overline{)280}\;\;20 \qquad \frac{280}{14} = 20$$

$$280 \div 14 = 20$$

Multiplication:

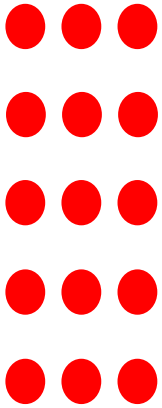
Array Model

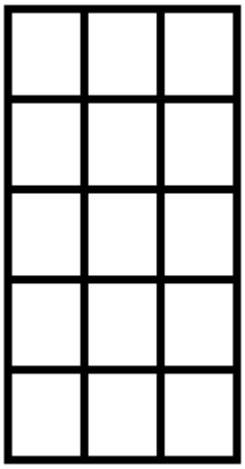
(an arrangement of objects in rows and columns)



3 x 5

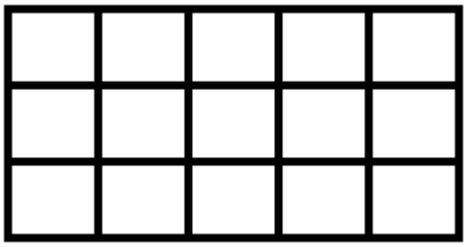
5 x 3





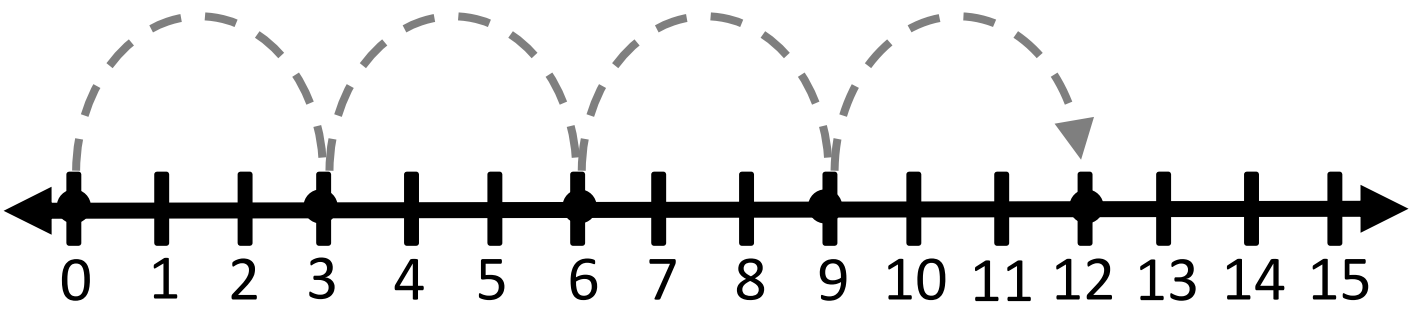
5 rows of 3

3 rows of 5



Multiplication:
Number Line Model

4 x 3

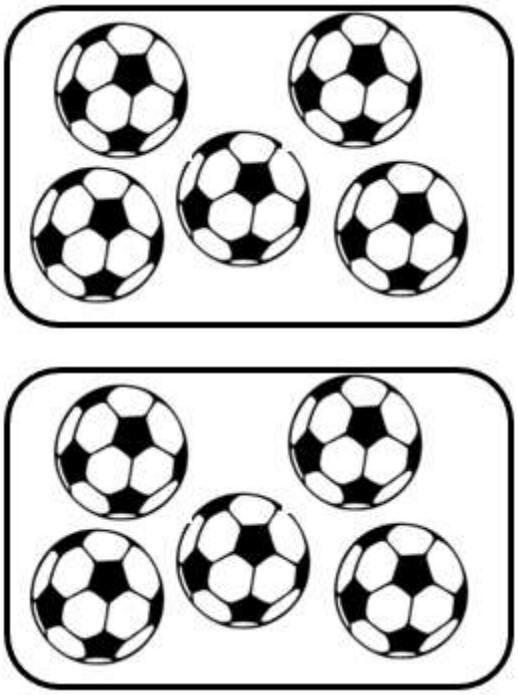


4 x 3 = 12

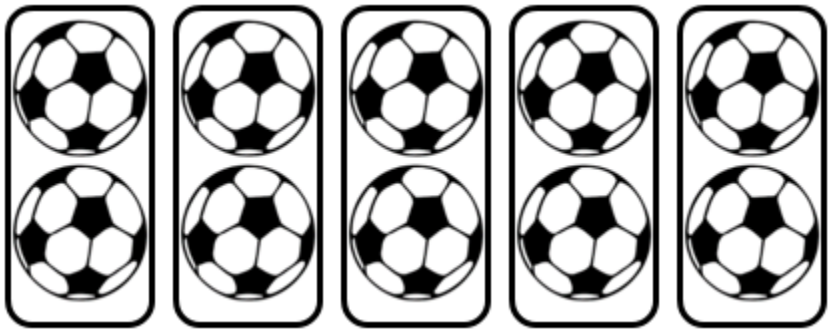
Multiplication:
Set Model

2 x 5

2 groups of 5
soccer balls
in each group



5 x 2

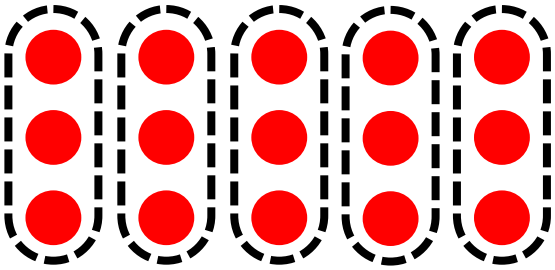


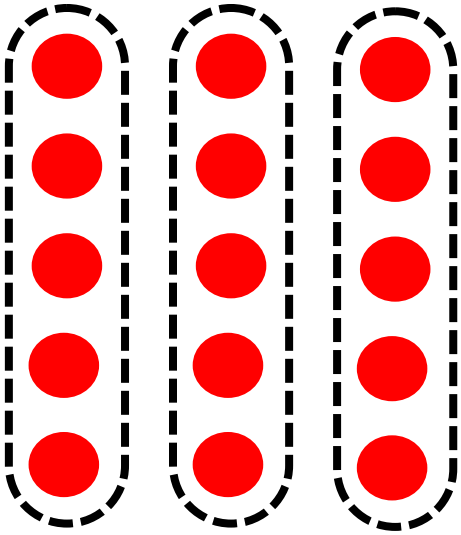
5 groups of 2
soccer balls
in each group

Division:

Array Model

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

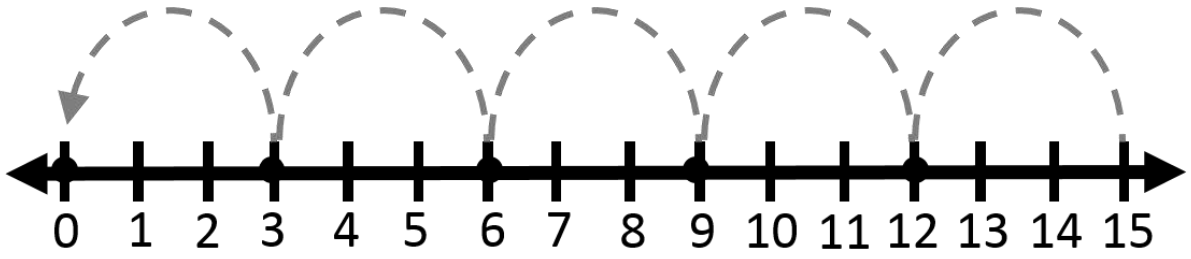




15 candies to be shared among 3 friends means each friend will receive 5 candies

Division:

Number Line

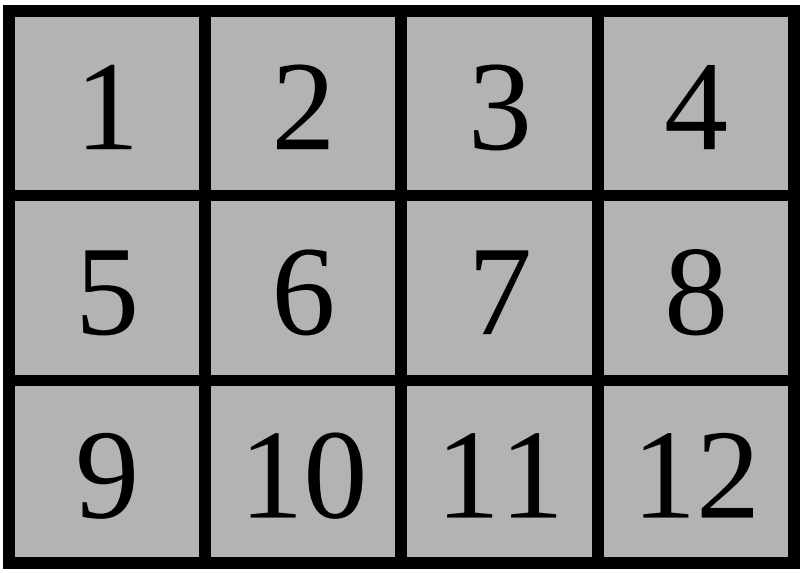


$15 \div 3 = 5$

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

Area:

Square Units



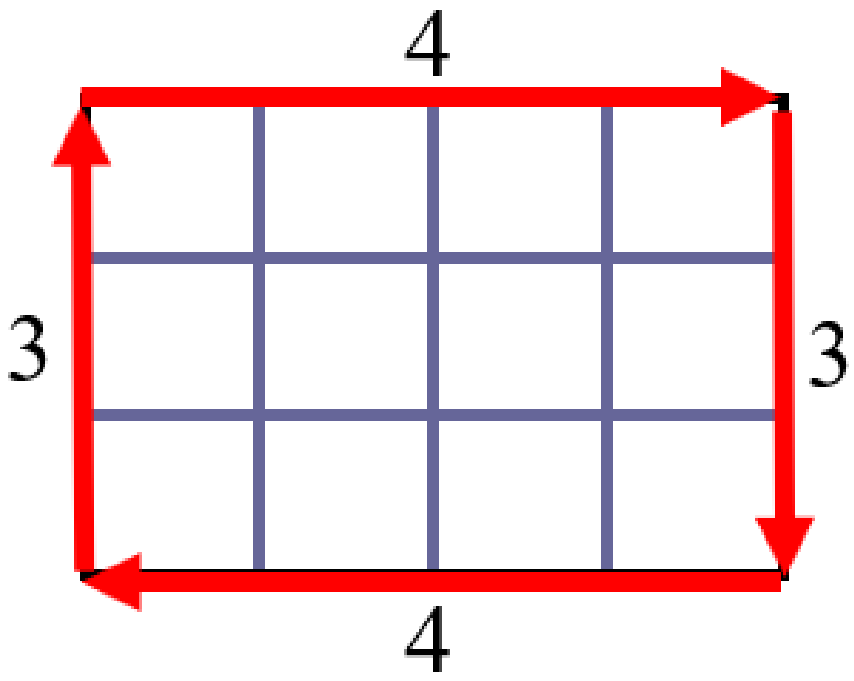
length x width

3 x 4 = 12

12 square units

Perimeter:

Units

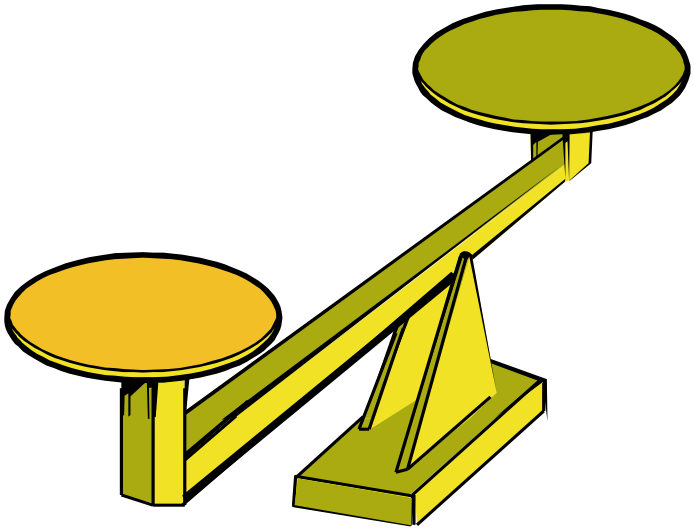


3 + 4 + 3 + 4

14 units

Balance Scale:

Weight/Mass



weight/mass

Scale:

Weight/Mass

weight/mass

Ounce (oz.):

Pounds

16 ounces = 1 pound

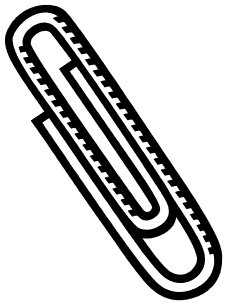
Pound (lb):

Ounces

1 pound = 16 ounces

Gram (g):

Kilograms



1,000 grams = 1 kilogram

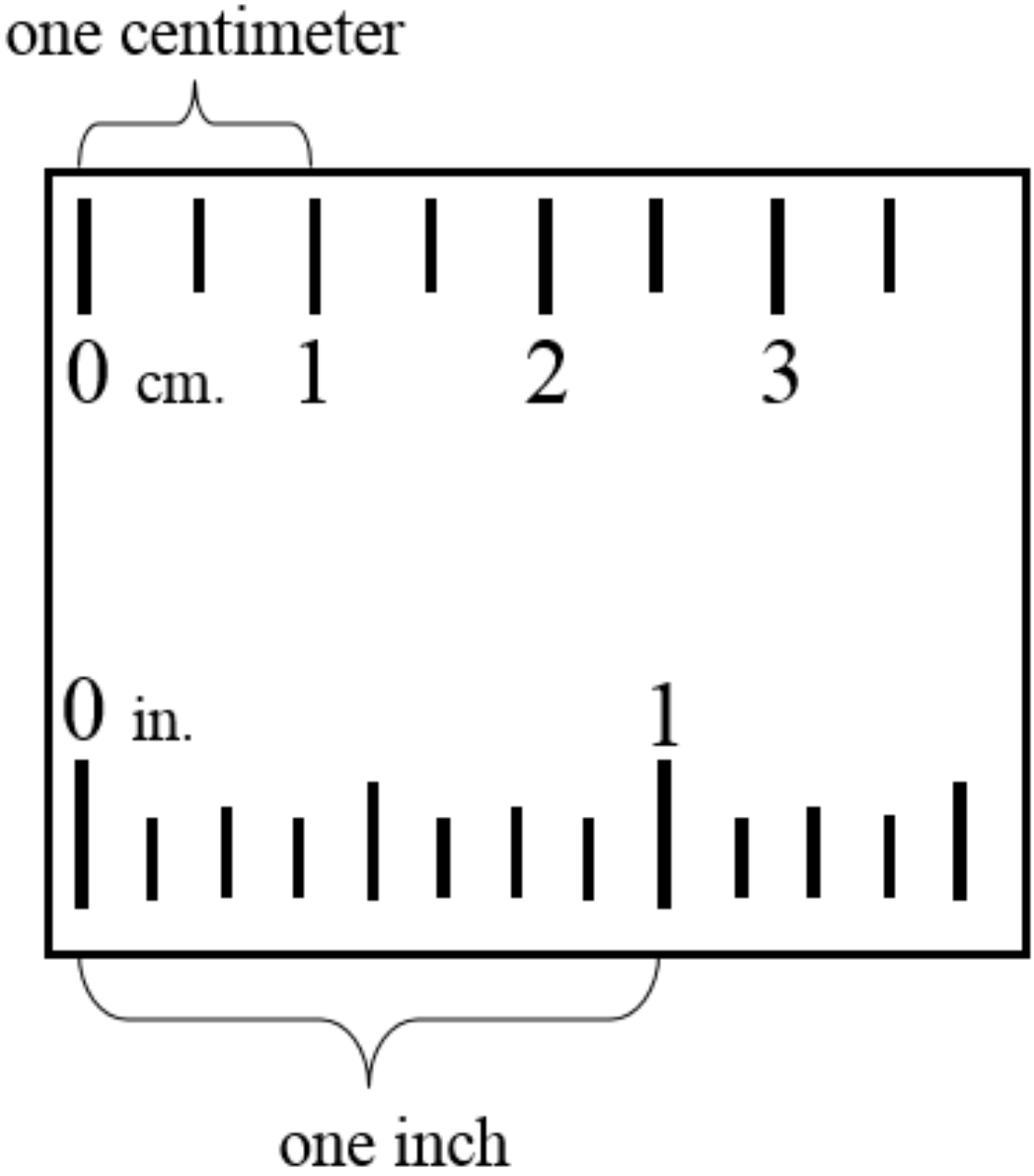
Kilogram (kg):

Grams

1 kilogram = 1,000 grams

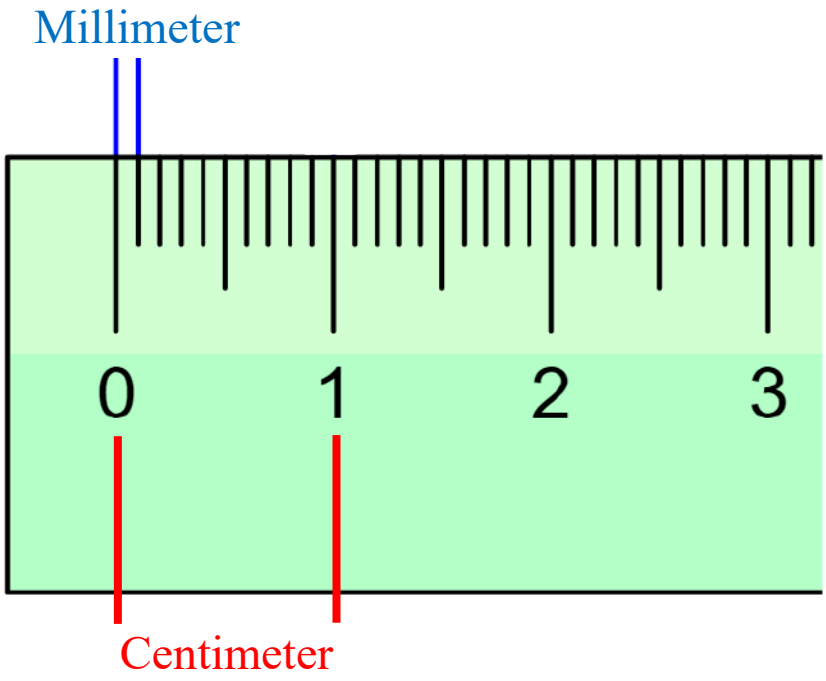
Ruler:

Centimeter and Inch



Millimeter (mm):

Centimeter



10 millimeters = 1 centimeter

Inches, Feet, and Yards

1 foot = 12 inches

1 yard = 36 inches

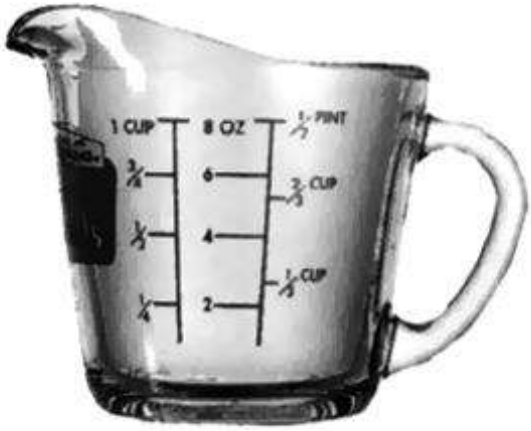
1 yard = 3 feet

Mile (mi):

Yards

1 mile =1,760 yards

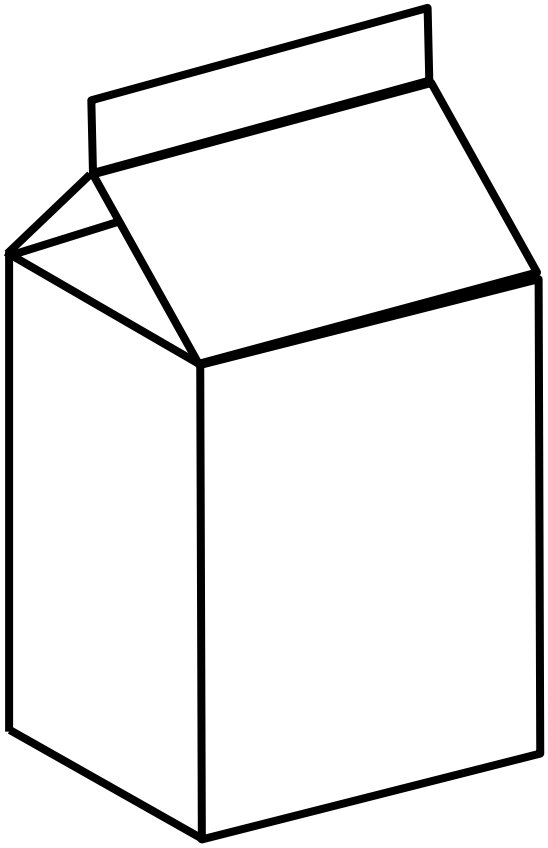
Cup:
Ounces



1 cup = 8 ounces

Pint:

Cups and Ounces



1 pint = 2 cups

1 pint = 16 ounces

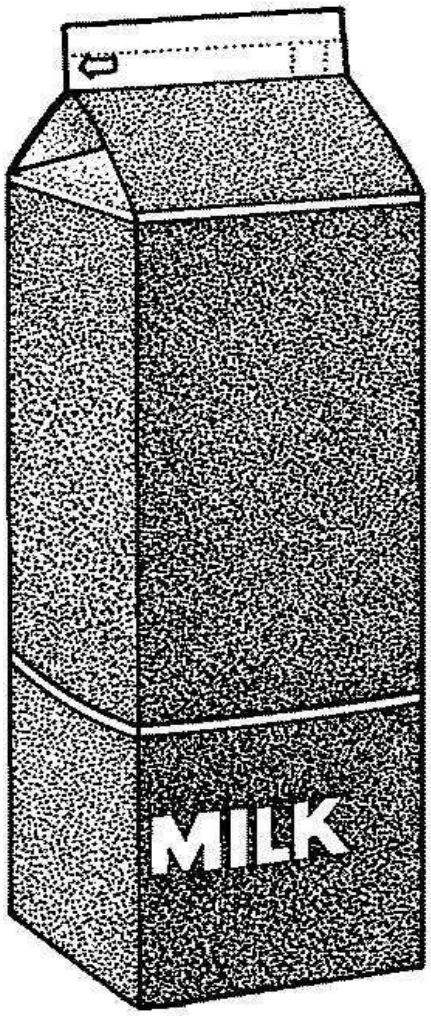
Quart:

Pints, Cups, and Ounces

1 quart = 2 pints

1 quart = 4 cups

1 quart = 32 ounces



Gallon:

Ounces

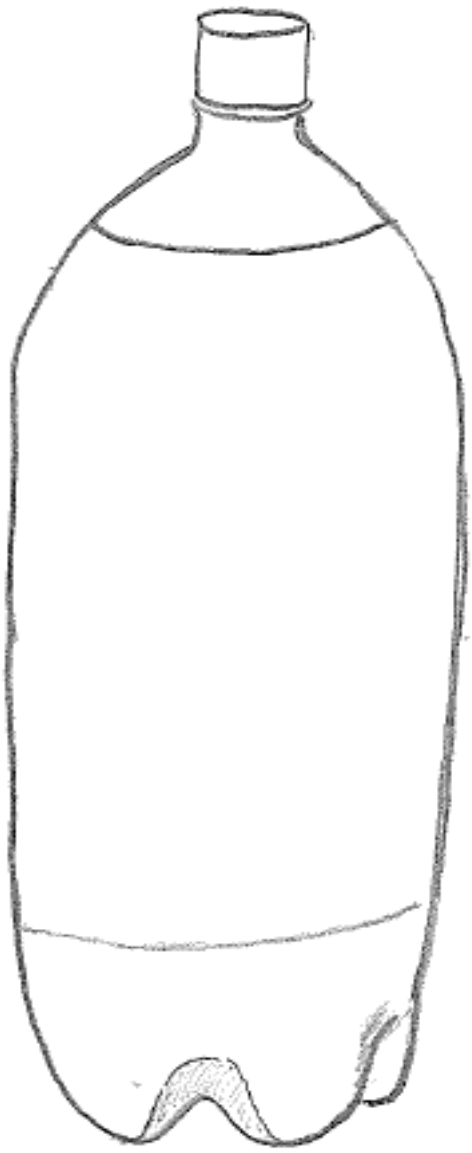
1 gallon = 64 ounces

1 gallon = 16 cups

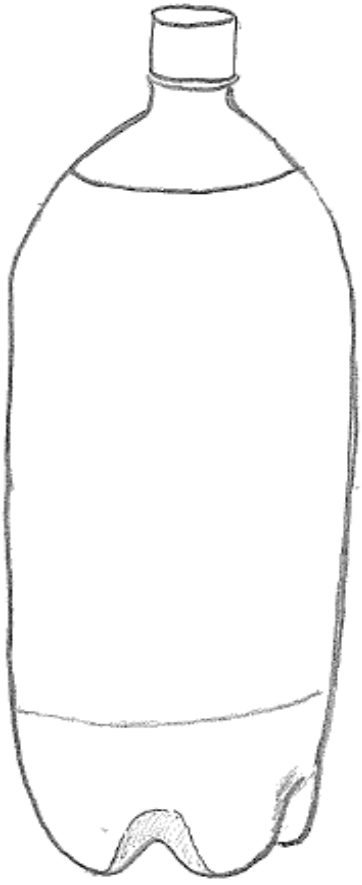
1 gallon = 8 pints

1 gallon = 4 quarts

Liter



2 liter

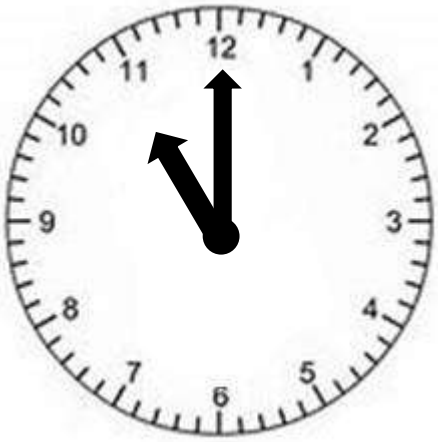


1 liter

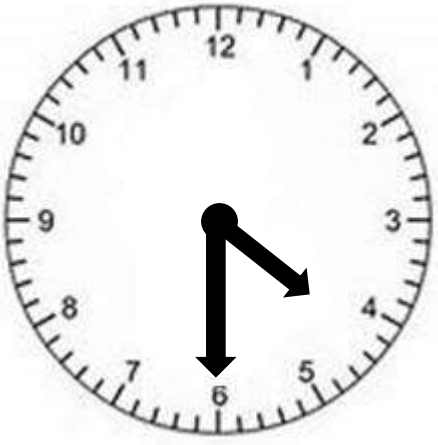
Elapsed Time

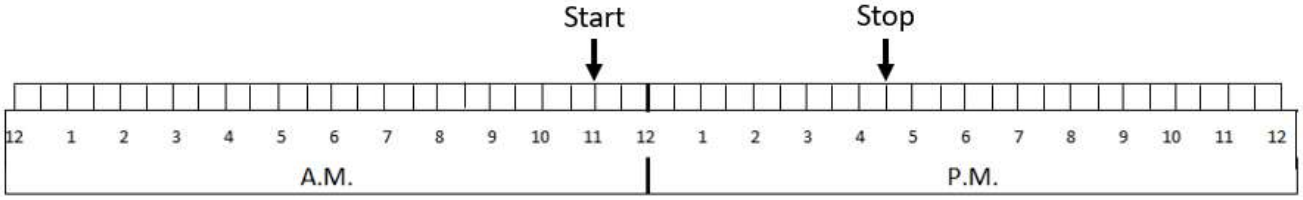
amount of time that has passed between two given times

START

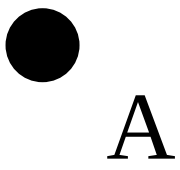


STOP



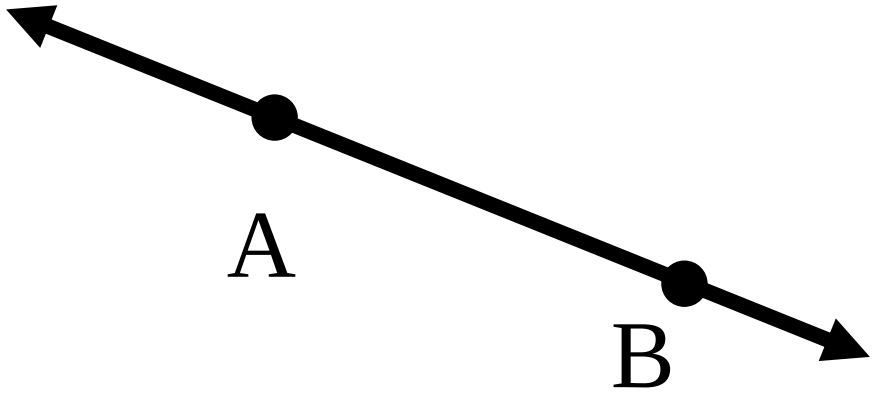


Point



point A

Line

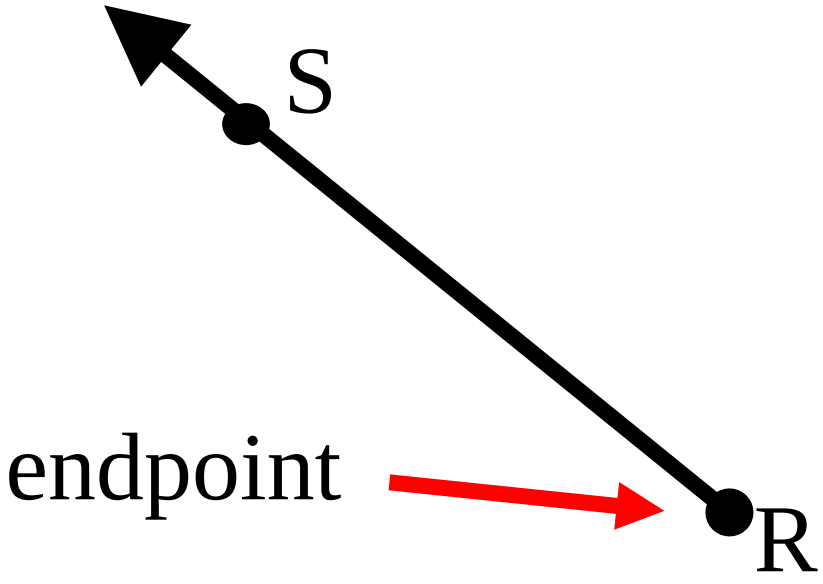


line AB

$\overleftrightarrow{AB}$

Ray:

Endpoint

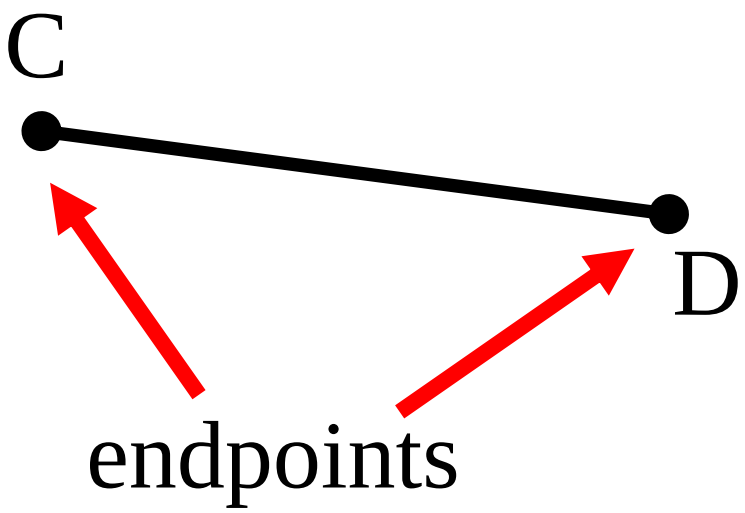


ray RS

$\overrightarrow{RS}$

Line Segment:

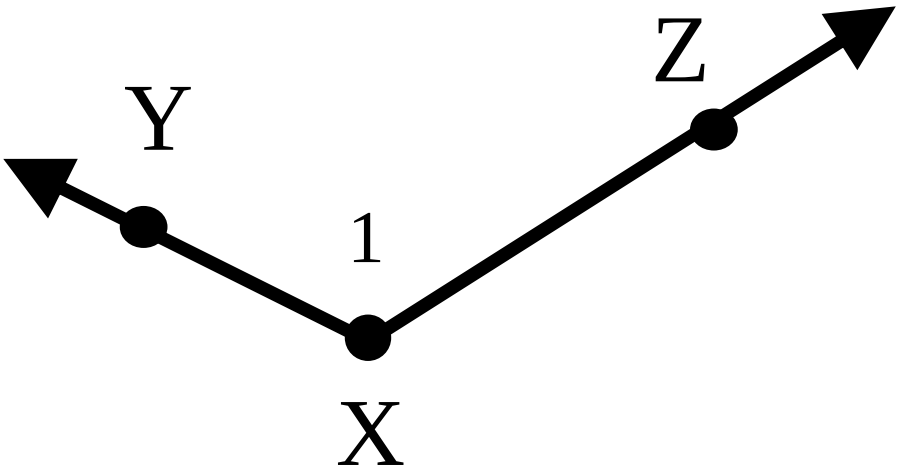
Endpoint



line segment CD

$\overline{CD}$

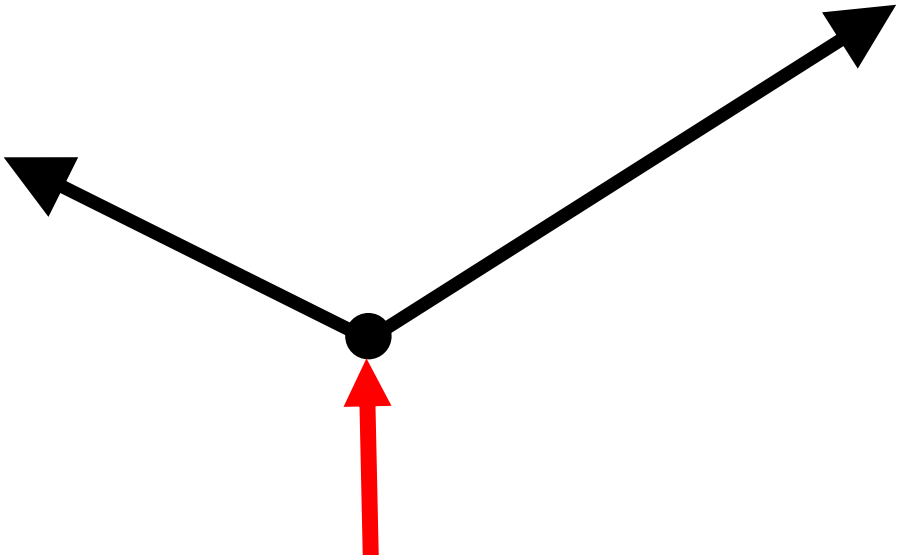
Angle



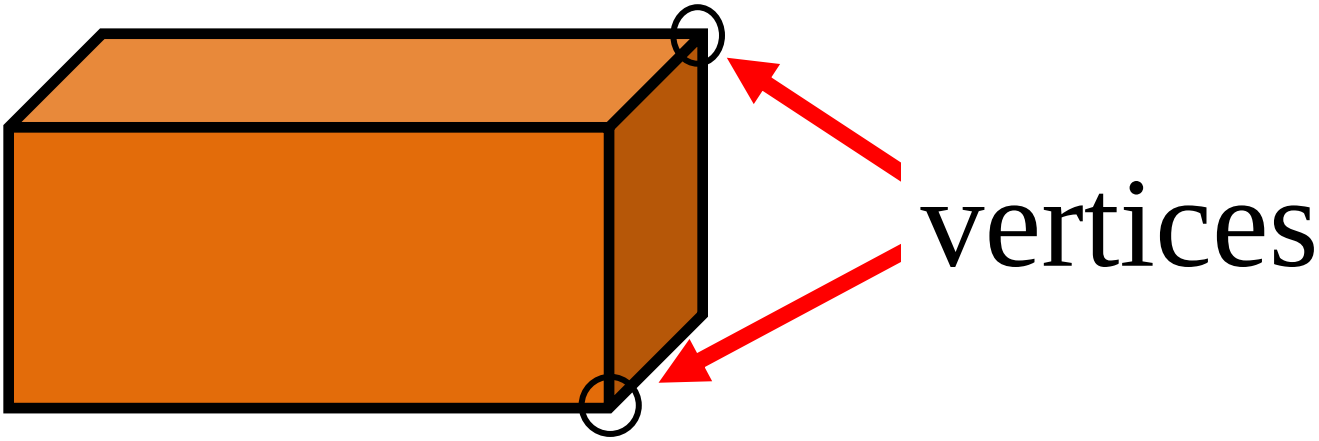
angle *YXZ*, angle *X*, or angle 1

$\angle YXZ$, $\angle X$, or $\angle 1$

Vertex

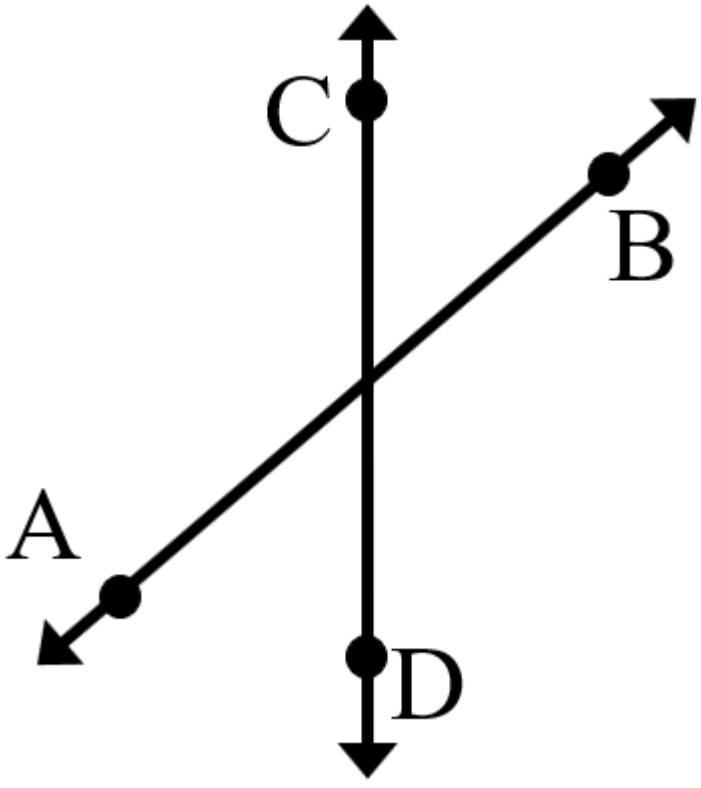


vertex

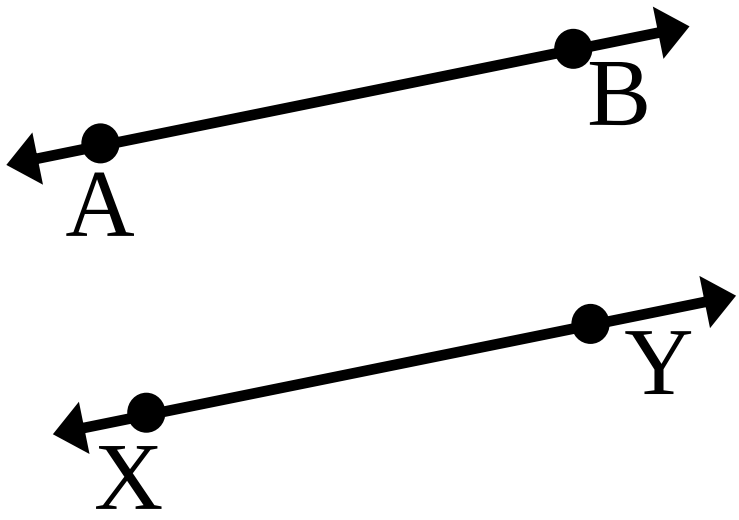


vertices

Intersecting Lines



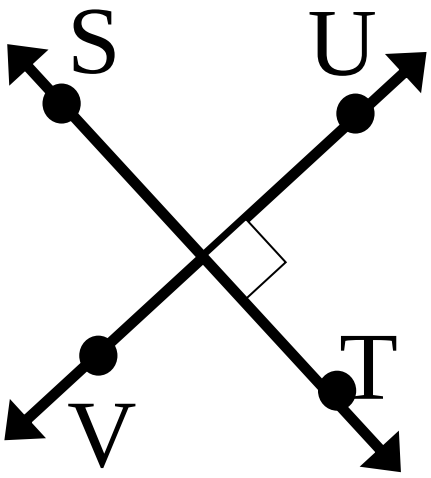
Parallel Lines



line *AB* is parallel to line *XY*

$$\overleftrightarrow{AB} \parallel \overleftrightarrow{XY}$$

Perpendicular Lines



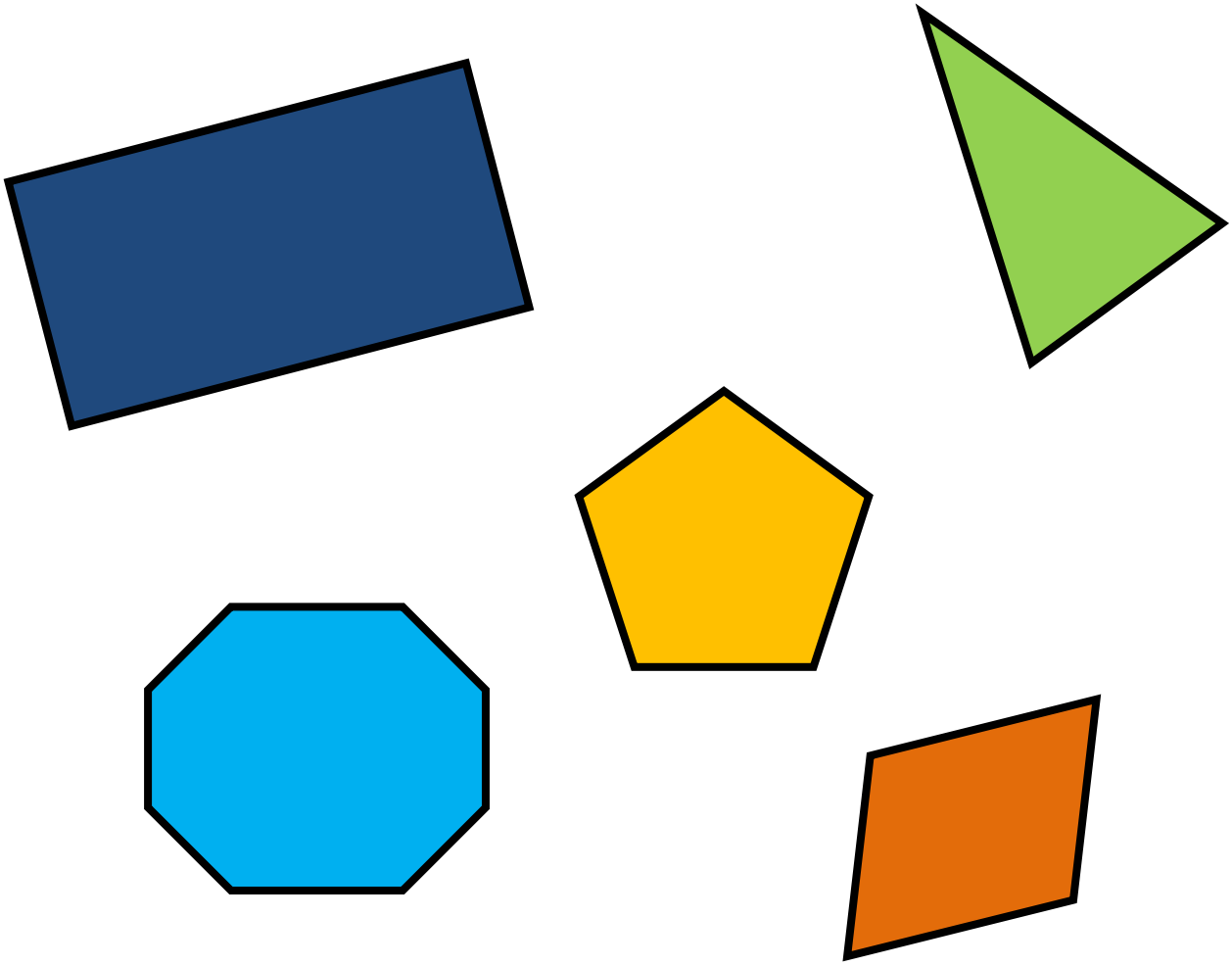
line ST is perpendicular to line UV

$\overleftrightarrow{ST} \perp \overleftrightarrow{UV}$

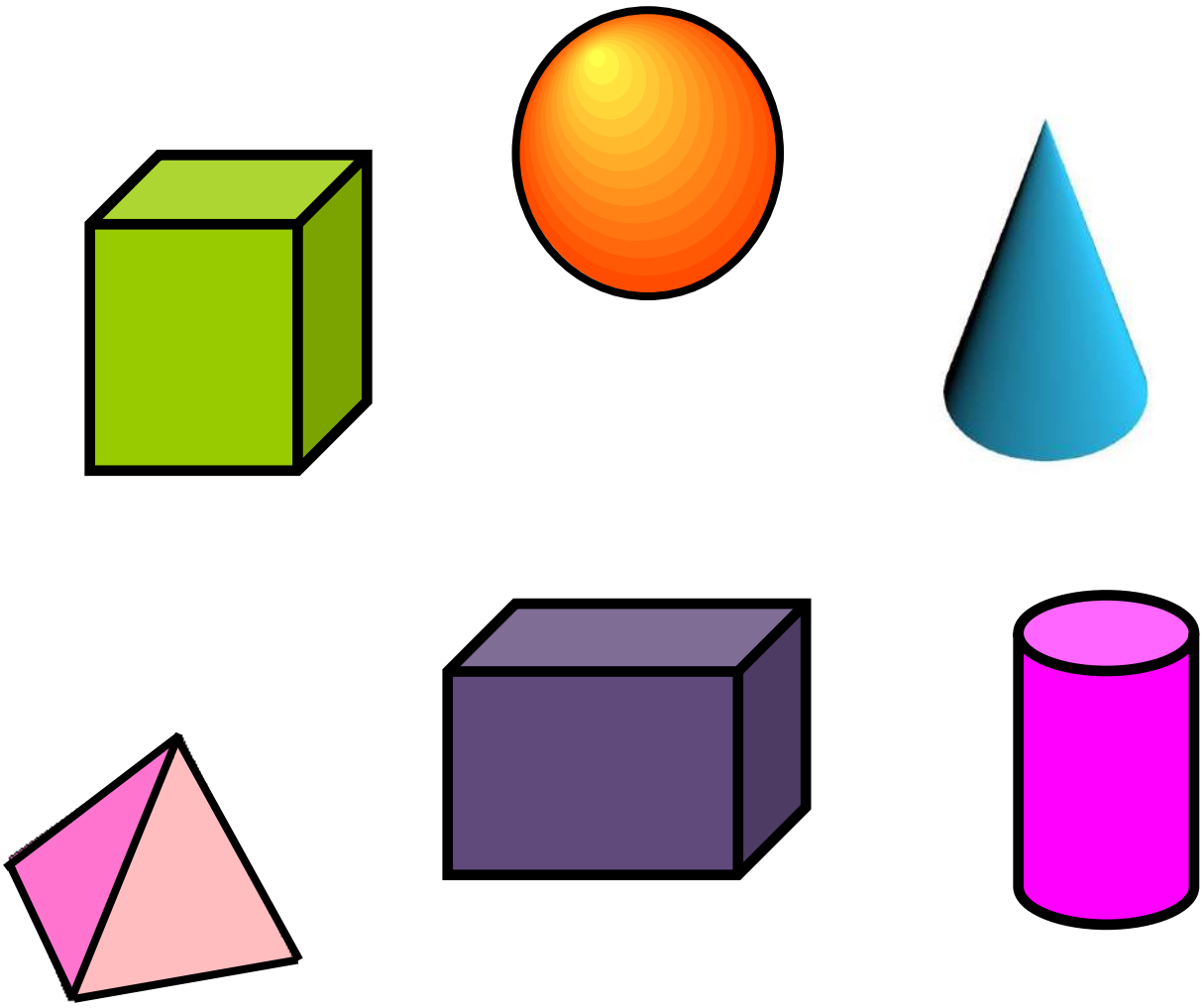
Symbolic Notations

Figure	Notation	Read
Point	A	Point A
Line	$\overleftrightarrow{AB}$	Line AB
Line segment	$\overline{CD}$	Line segment CD
Ray	$\overrightarrow{RS}$	Ray RS
Angle	$\angle YXZ$, $\angle X$, or $\angle 1$	Angle YXZ, Angle X, or Angle 1
Parallel lines	$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$	Line AB is parallel to line CD
Perpendicular lines	$\overleftrightarrow{ST} \perp \overleftrightarrow{UV}$	Line ST is perpendicular to line UV

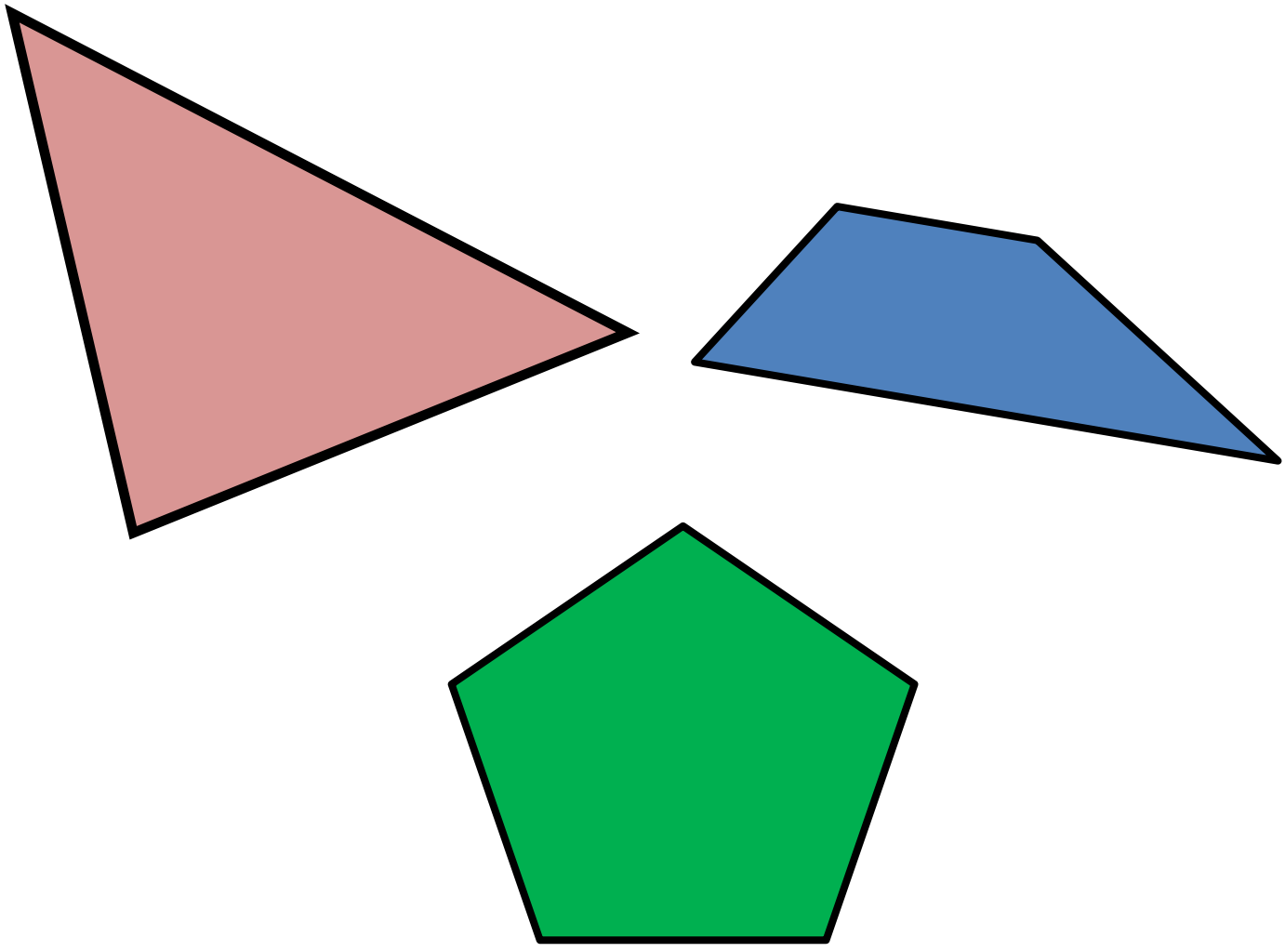
Plane Figures



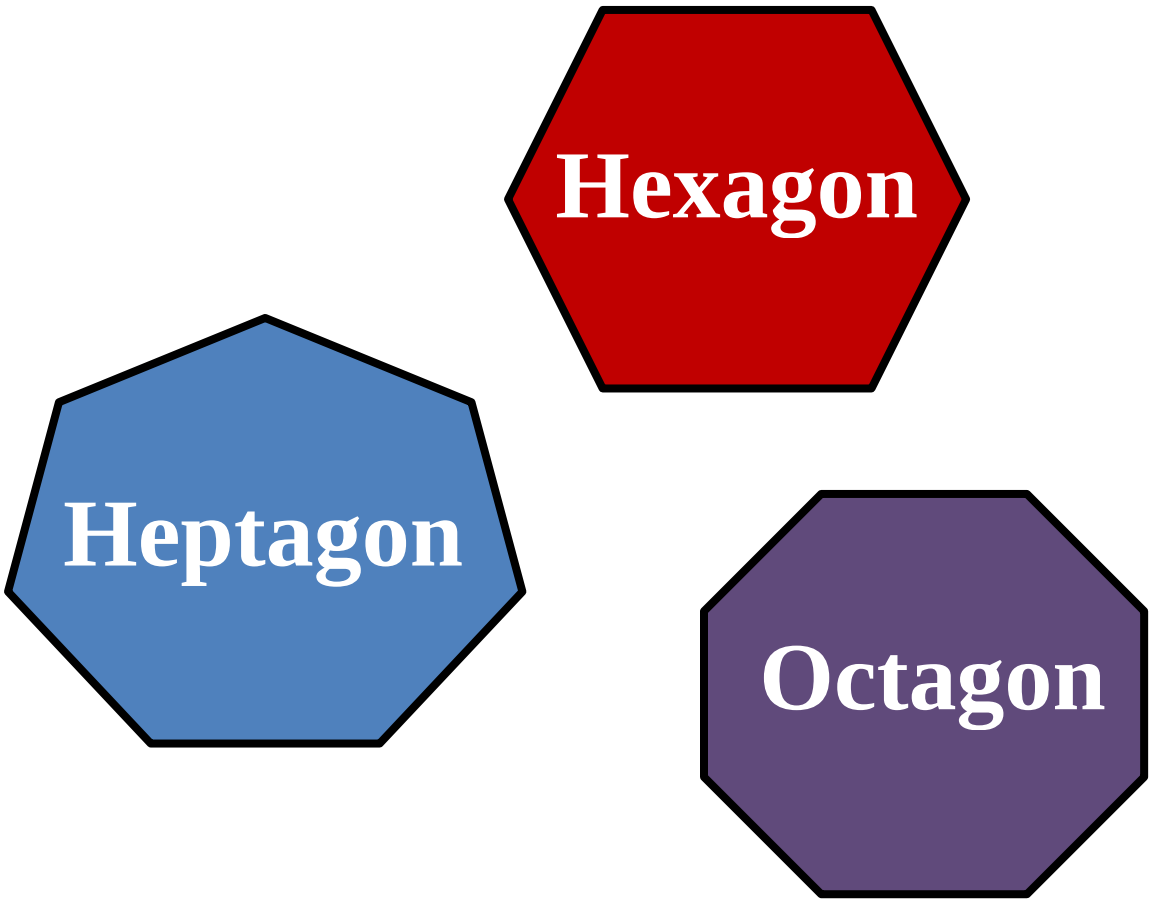
Solid Figures



Polygons:
Triangle, Quadrilateral, and Pentagon



Polygons:
Hexagon, Heptagon, and Octagon

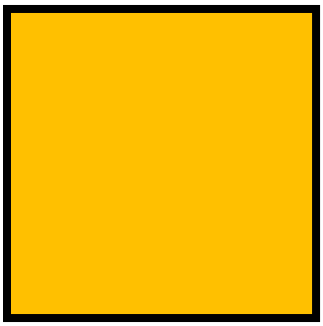


Polygons:
Nonagon and Decagon

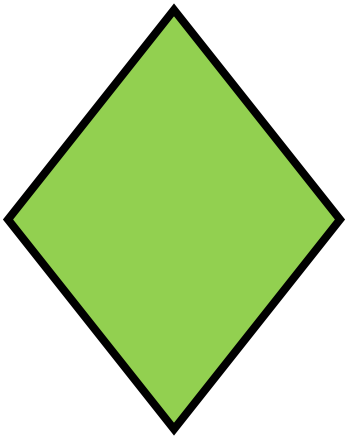
Quadrilaterals

parallelogram

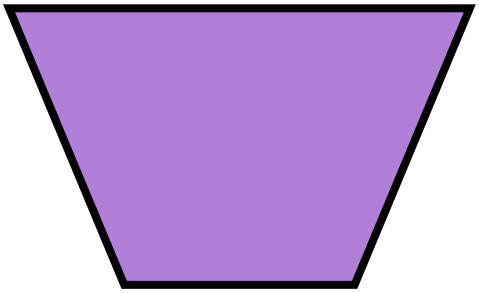
rectangle



square

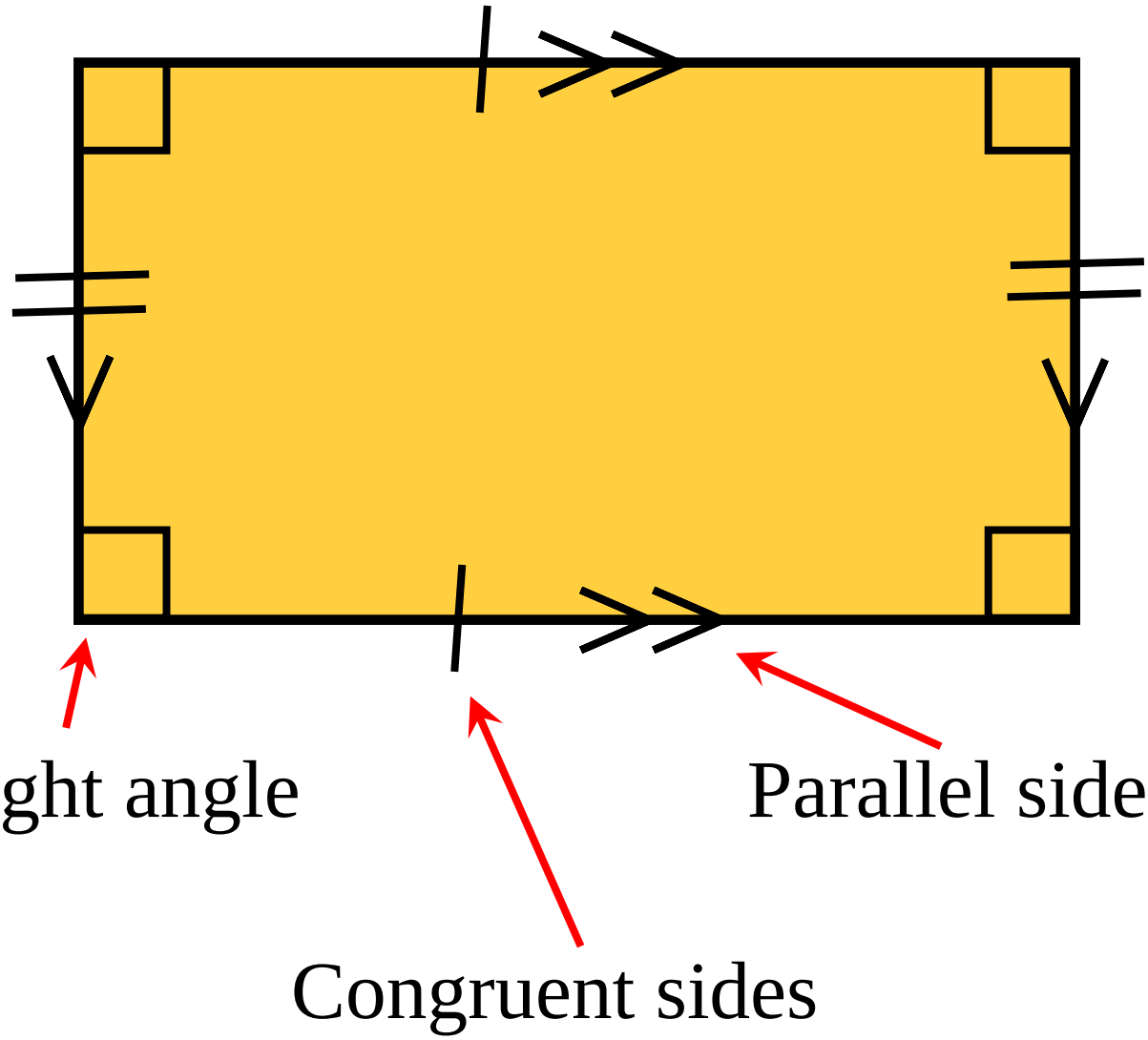


rhombus

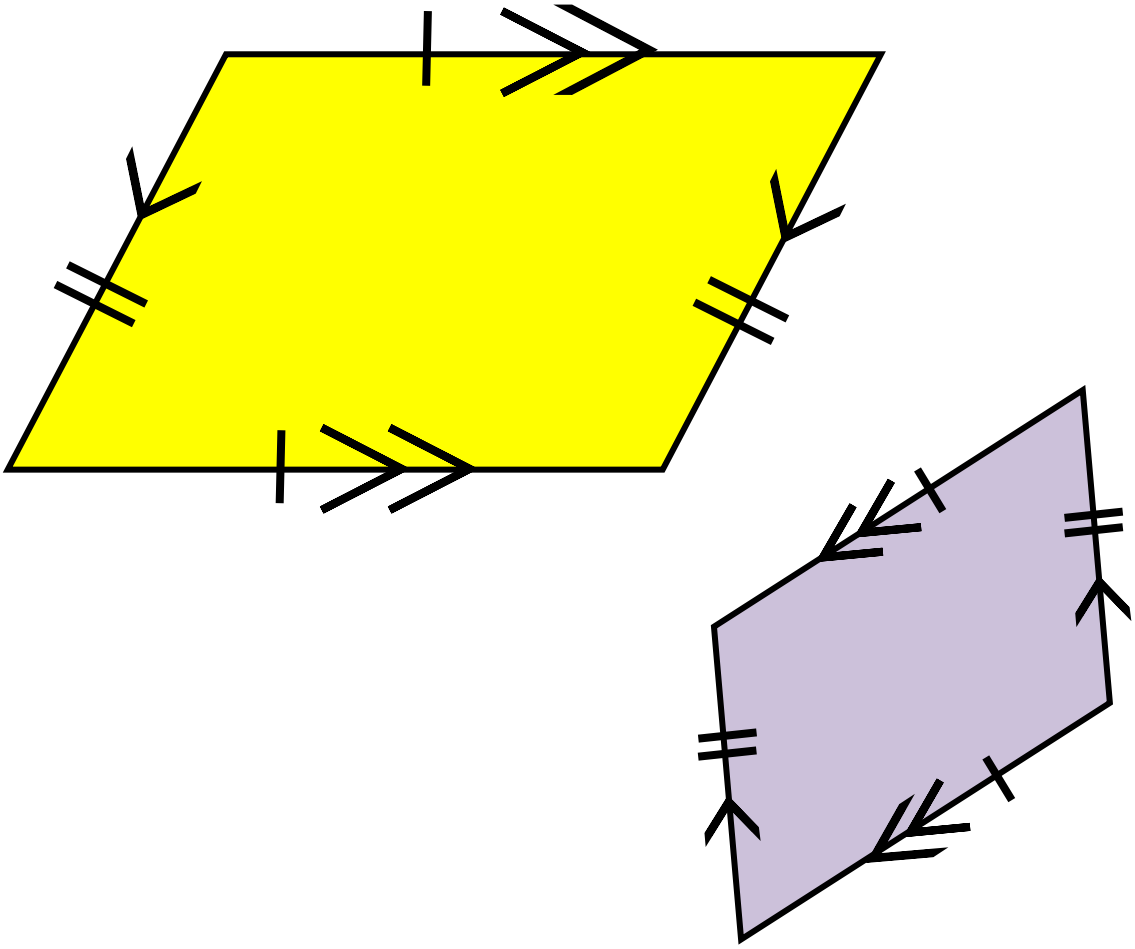


trapezoid

Geometric Markings



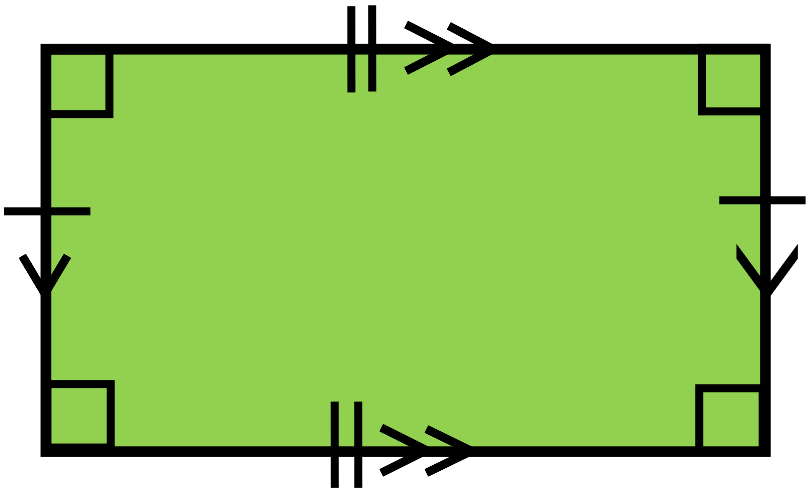
Parallelogram

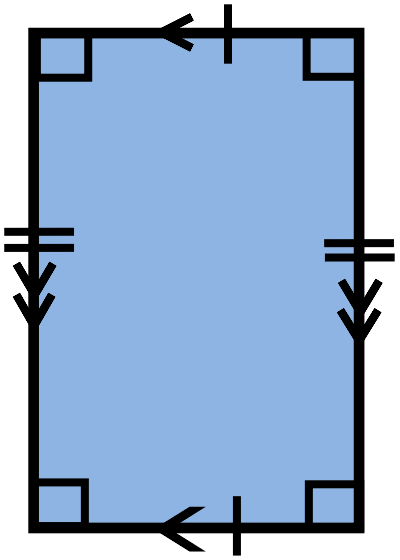


- opposite sides are parallel and congruent

Rectangle:

Right Angle

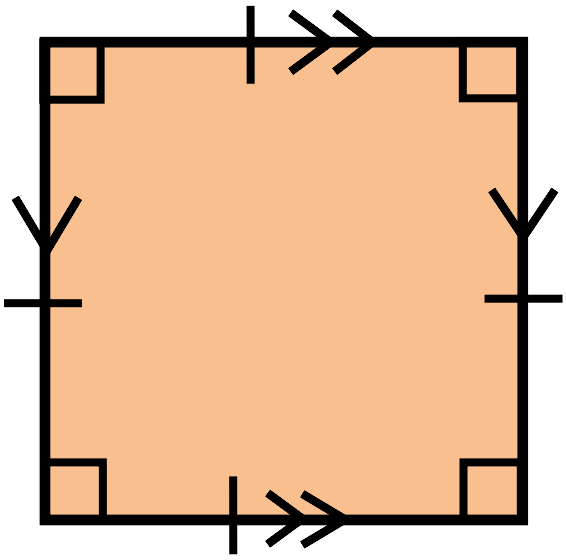


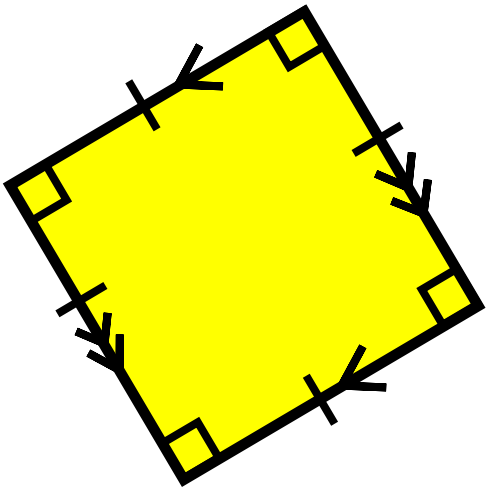


- 4 right angles
- opposite sides are parallel and congruent

Square:

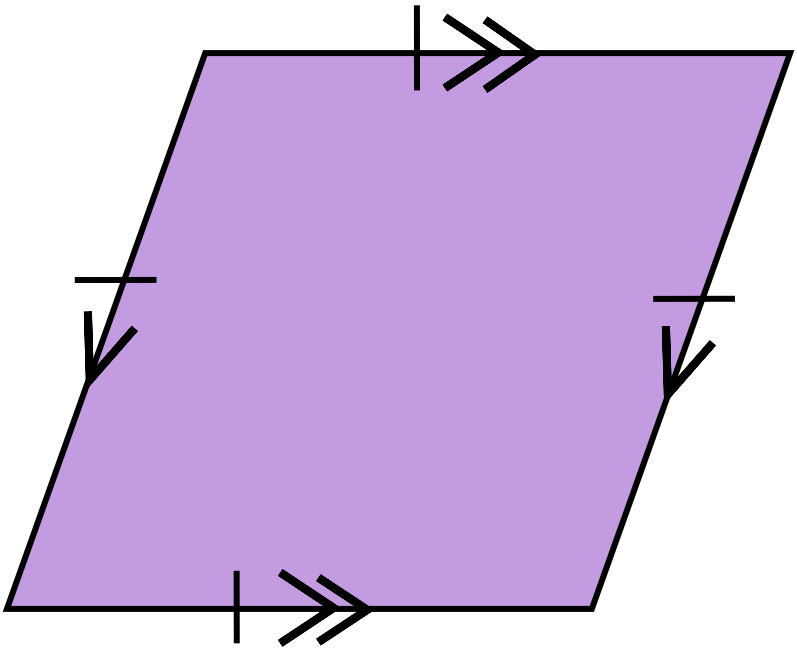
Right Angle

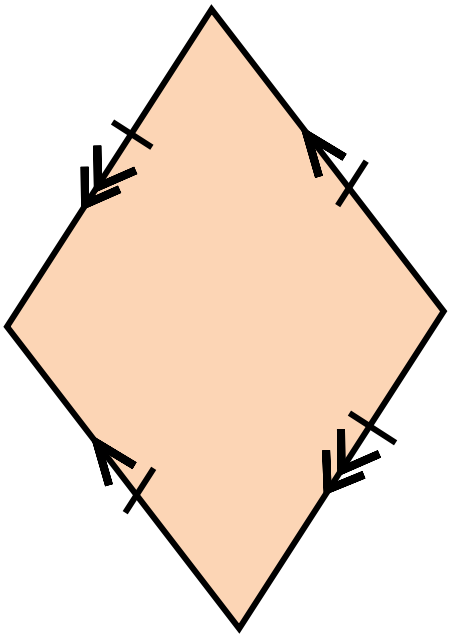




- 4 right angles
- 4 congruent sides
- 2 pairs of parallel sides

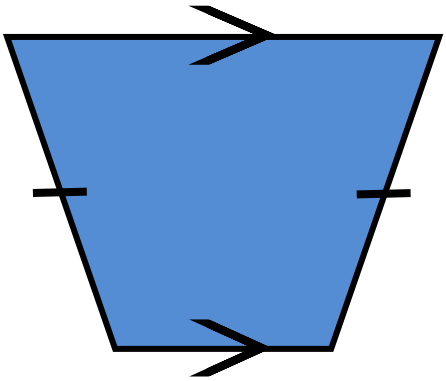
Rhombus

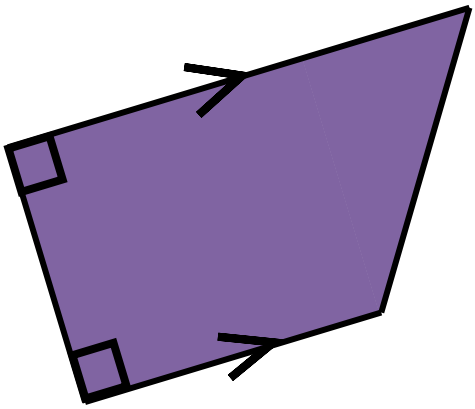


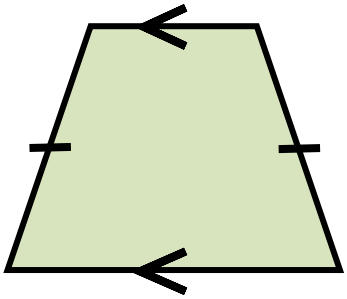


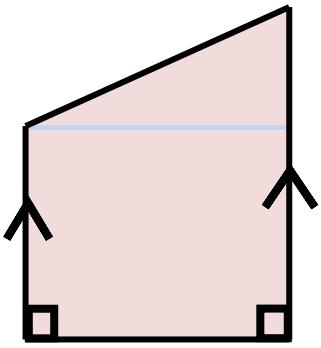
- 4 congruent sides
- 2 pairs of parallel sides
- opposite angles are congruent

Trapezoid



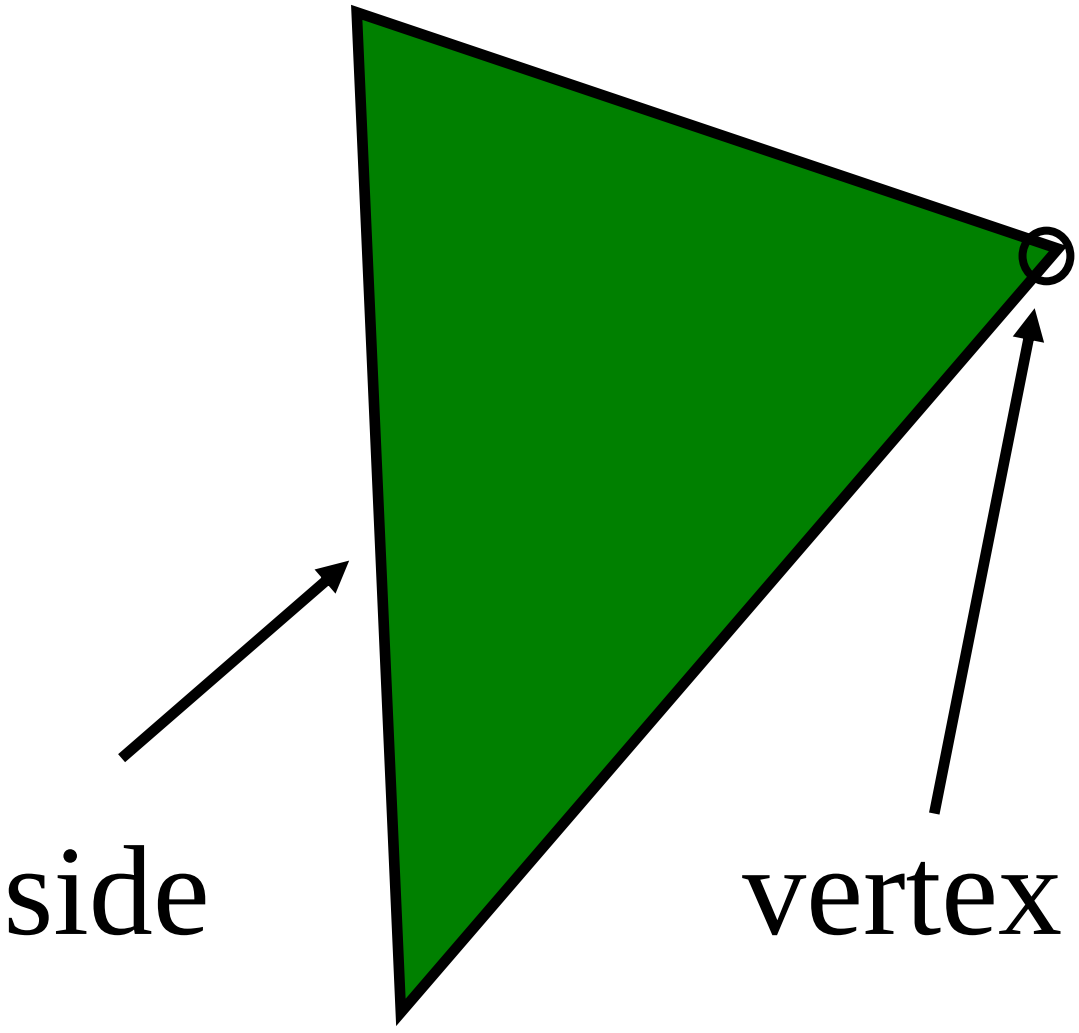






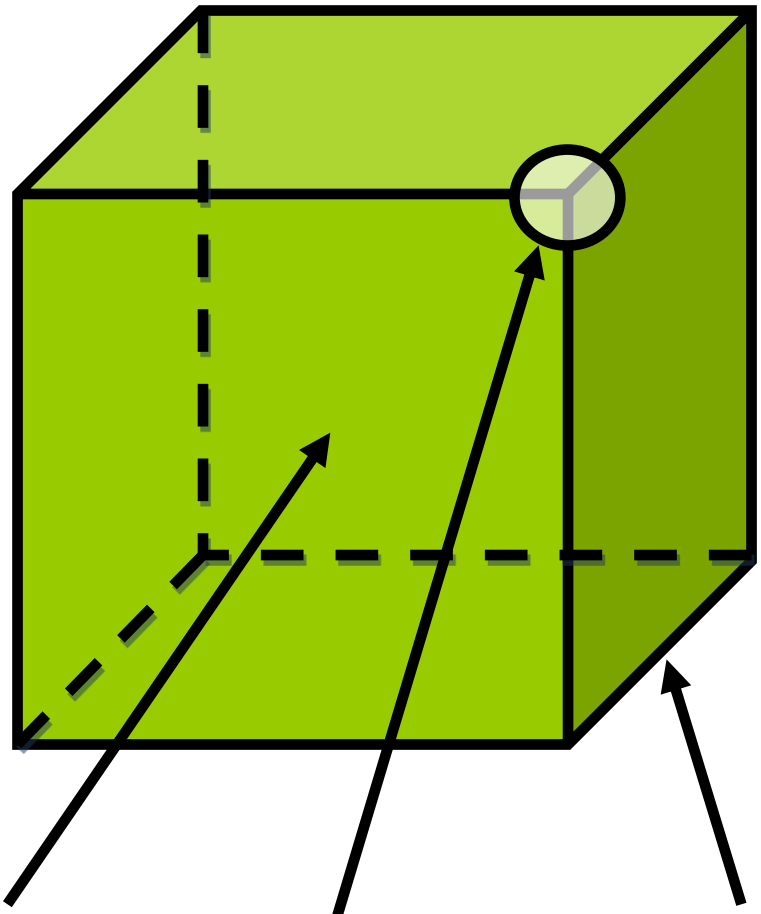
- exactly one pair of parallel sides

Triangle:
Side and Vertex



Sphere

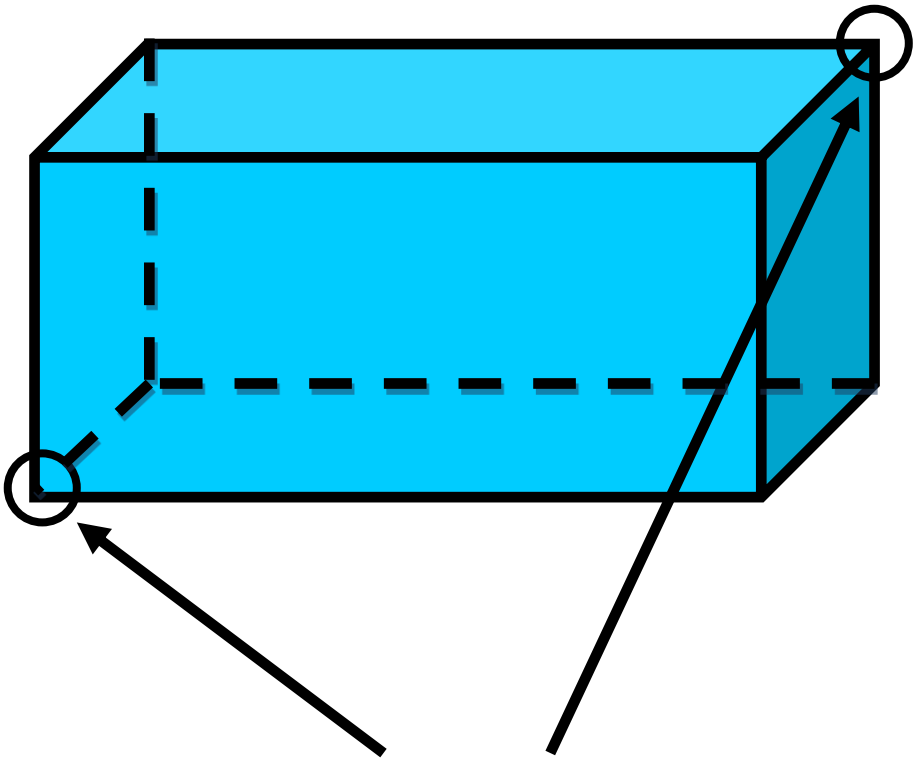
Cube



face vertex edge

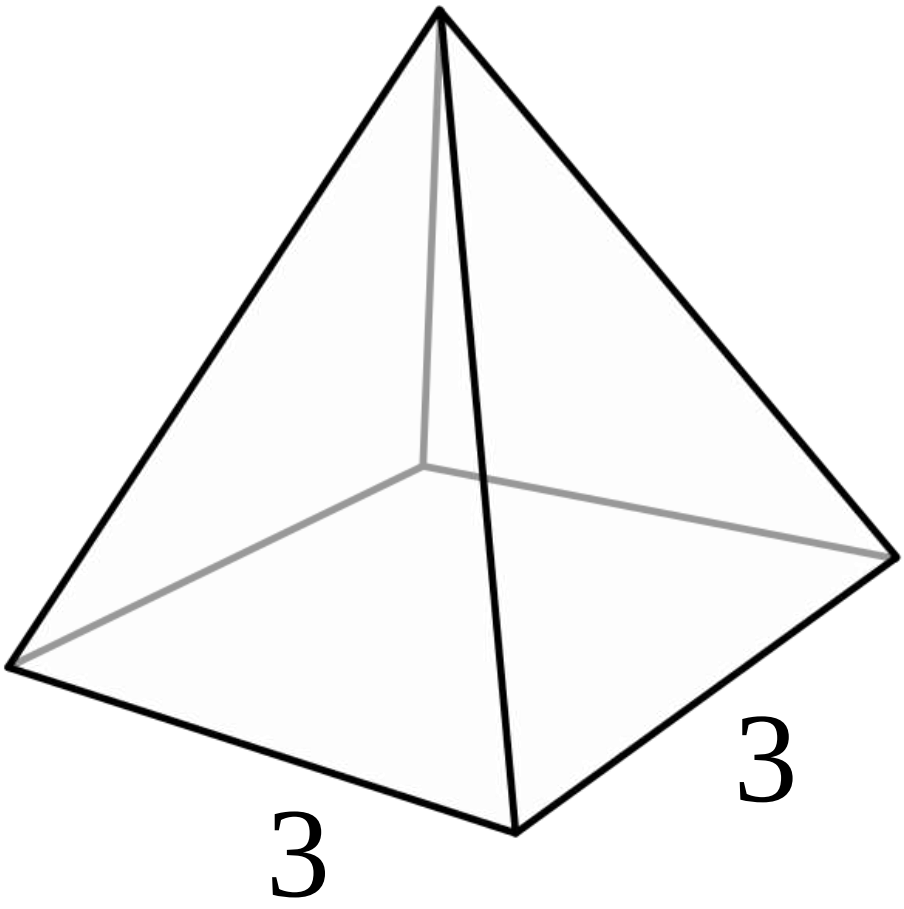
Rectangular Prism:

Vertices

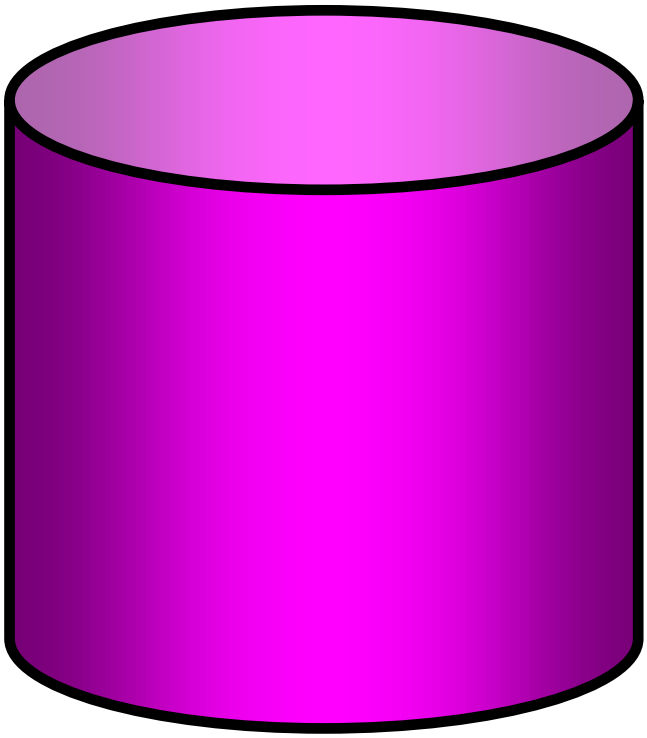


vertices

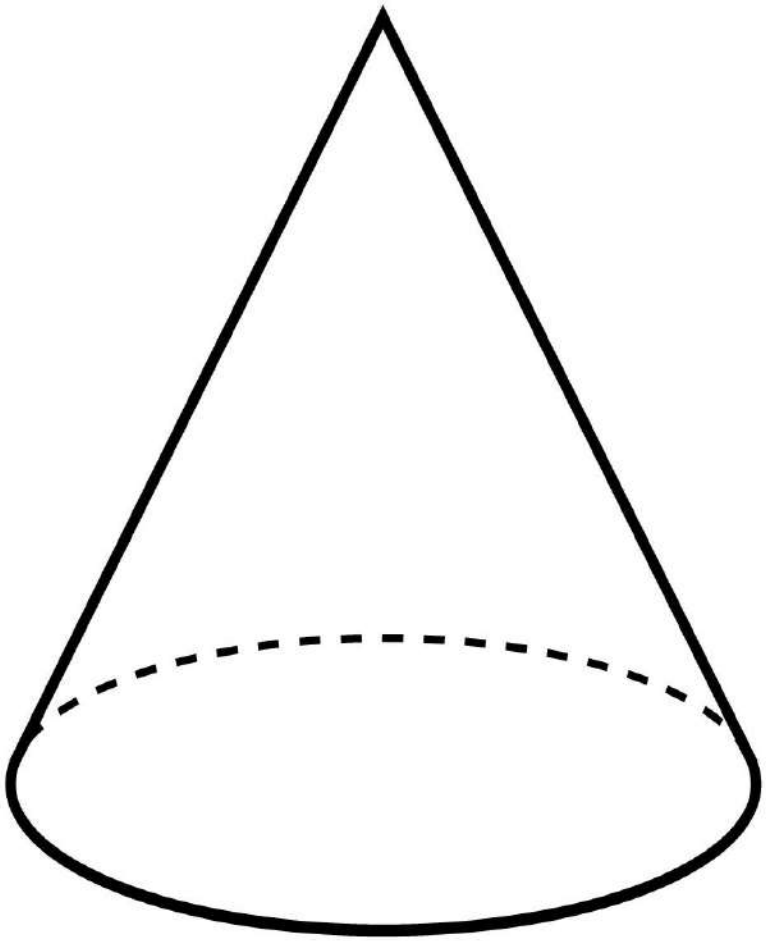
Square Pyramid



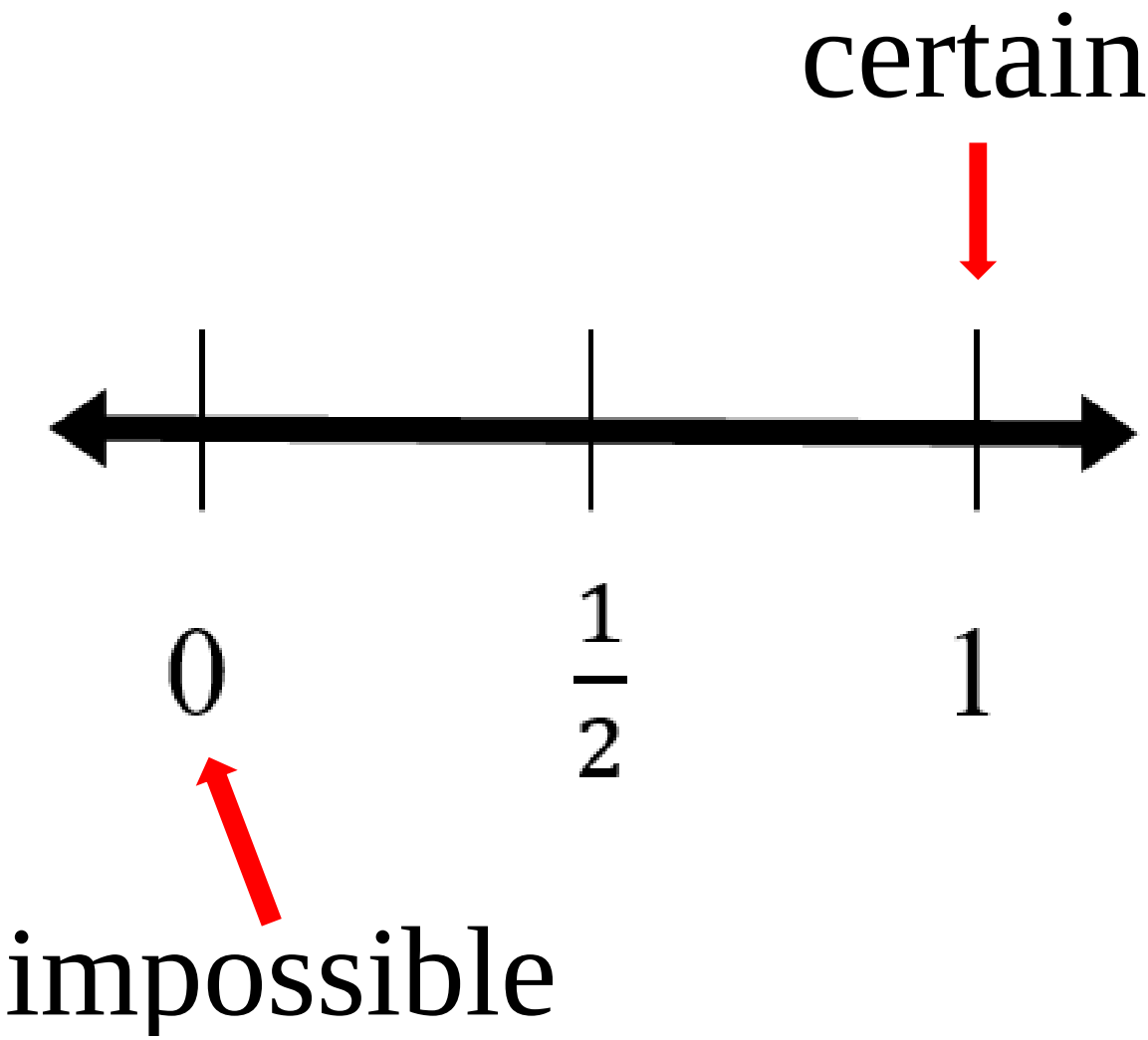
Cylinder



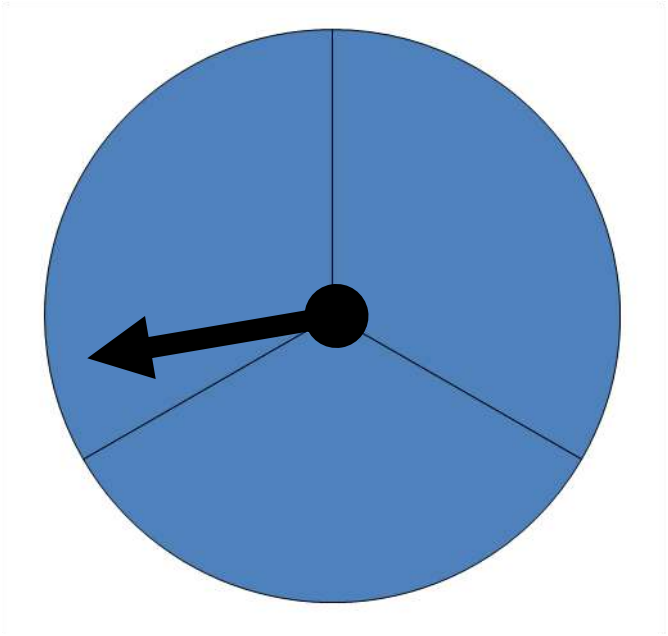
Cone



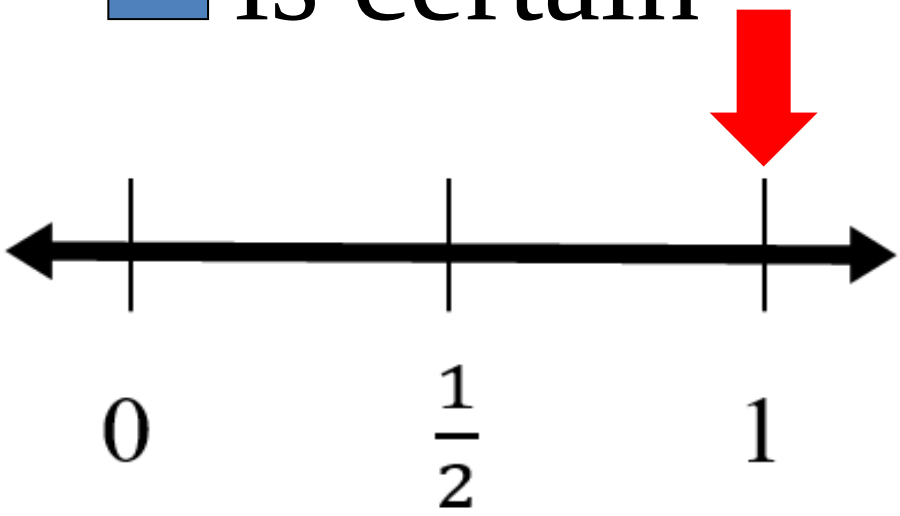
Probability Number Line



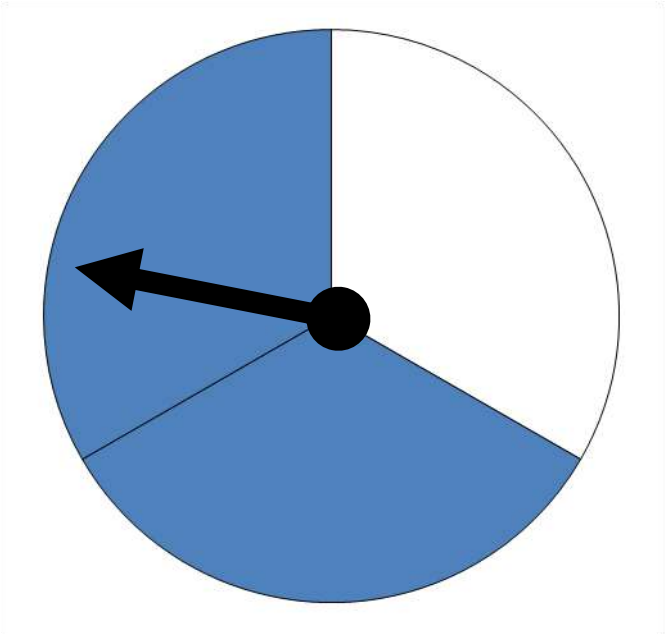
Certain



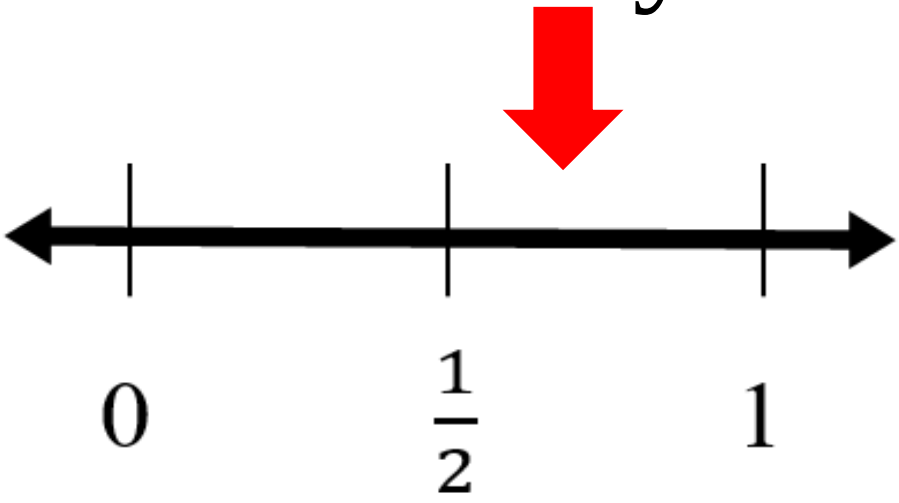
is certain



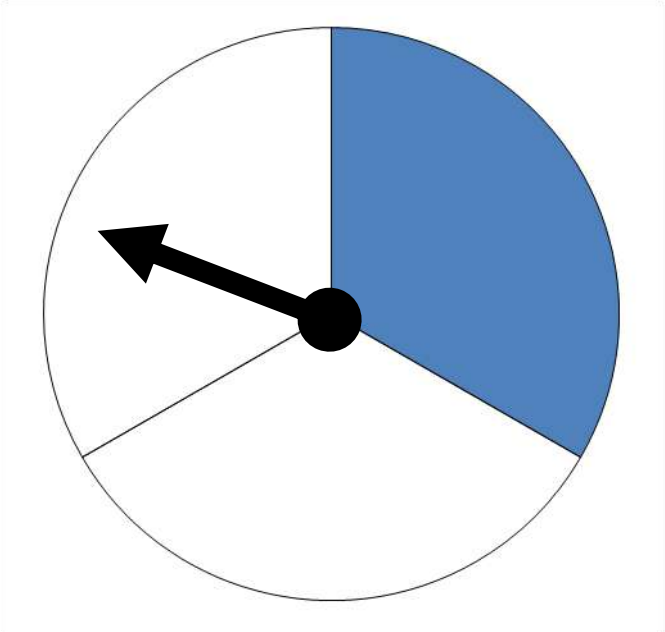
Likely



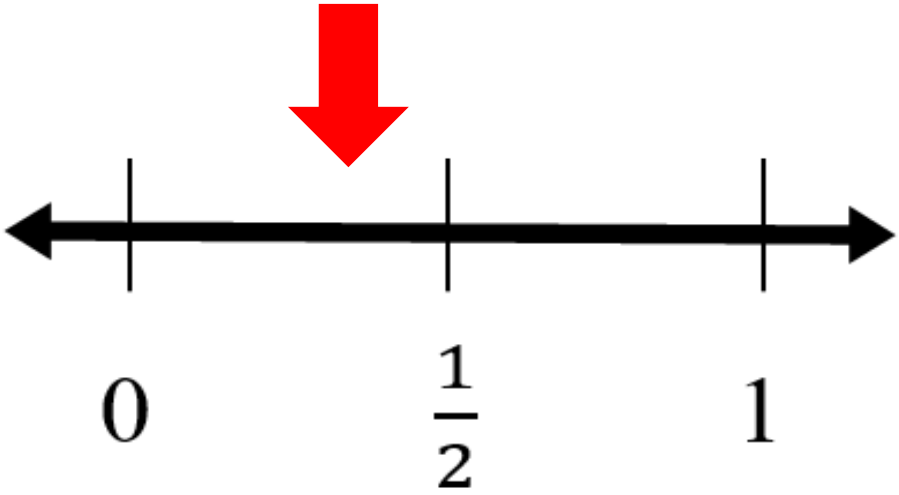
is likely



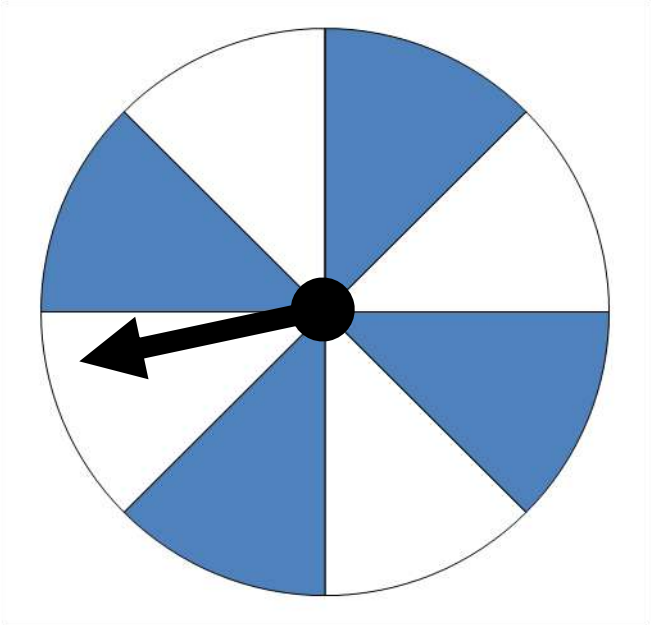
Unlikely



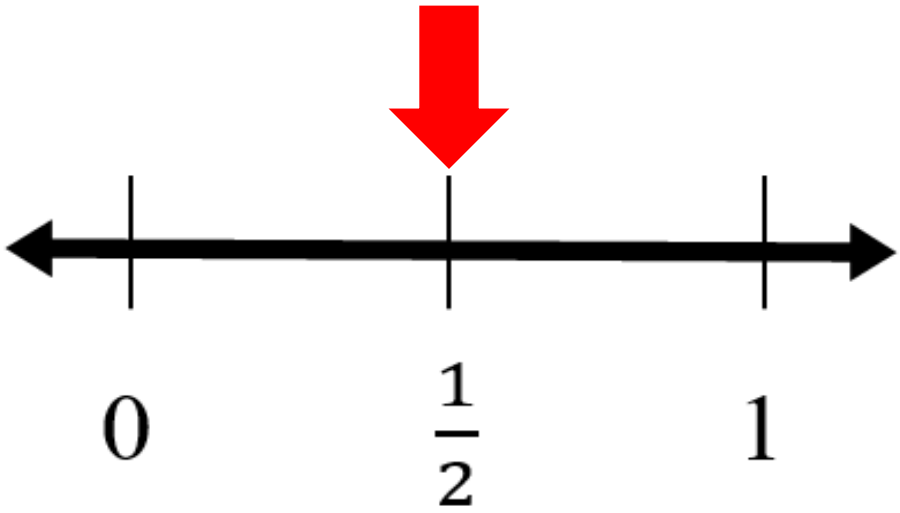
is unlikely



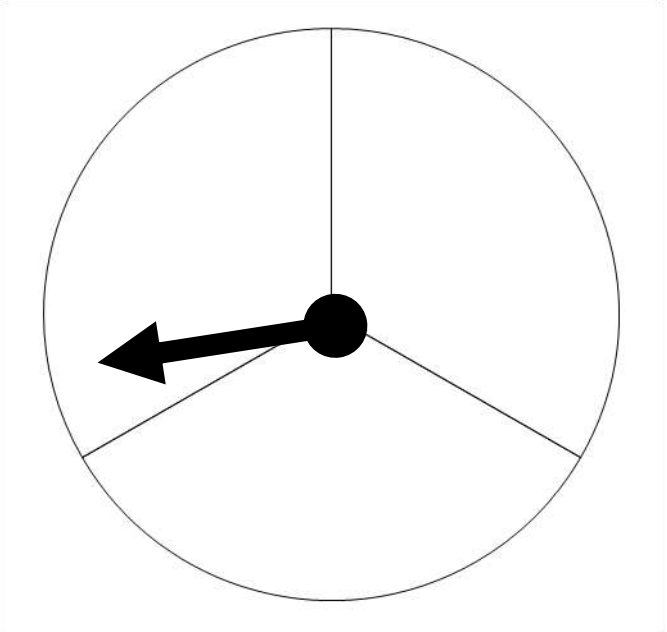
Equally likely



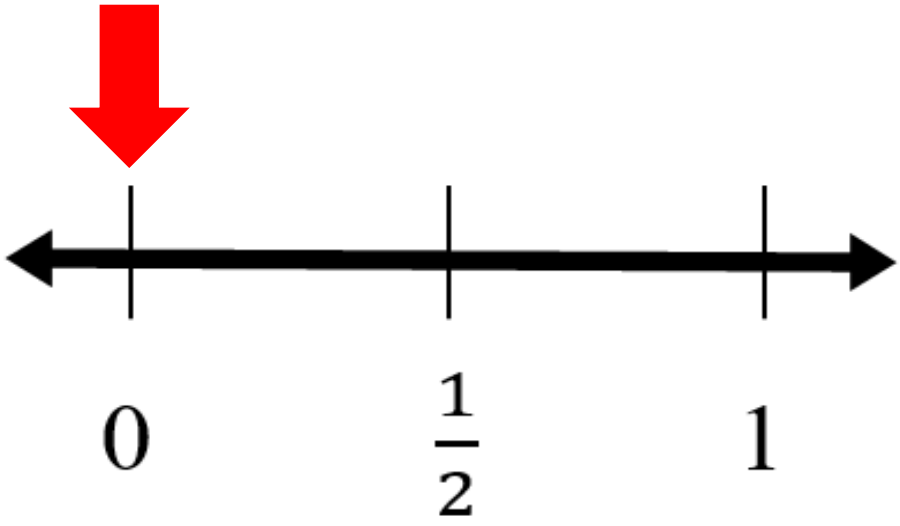
■ and □ are equally likely



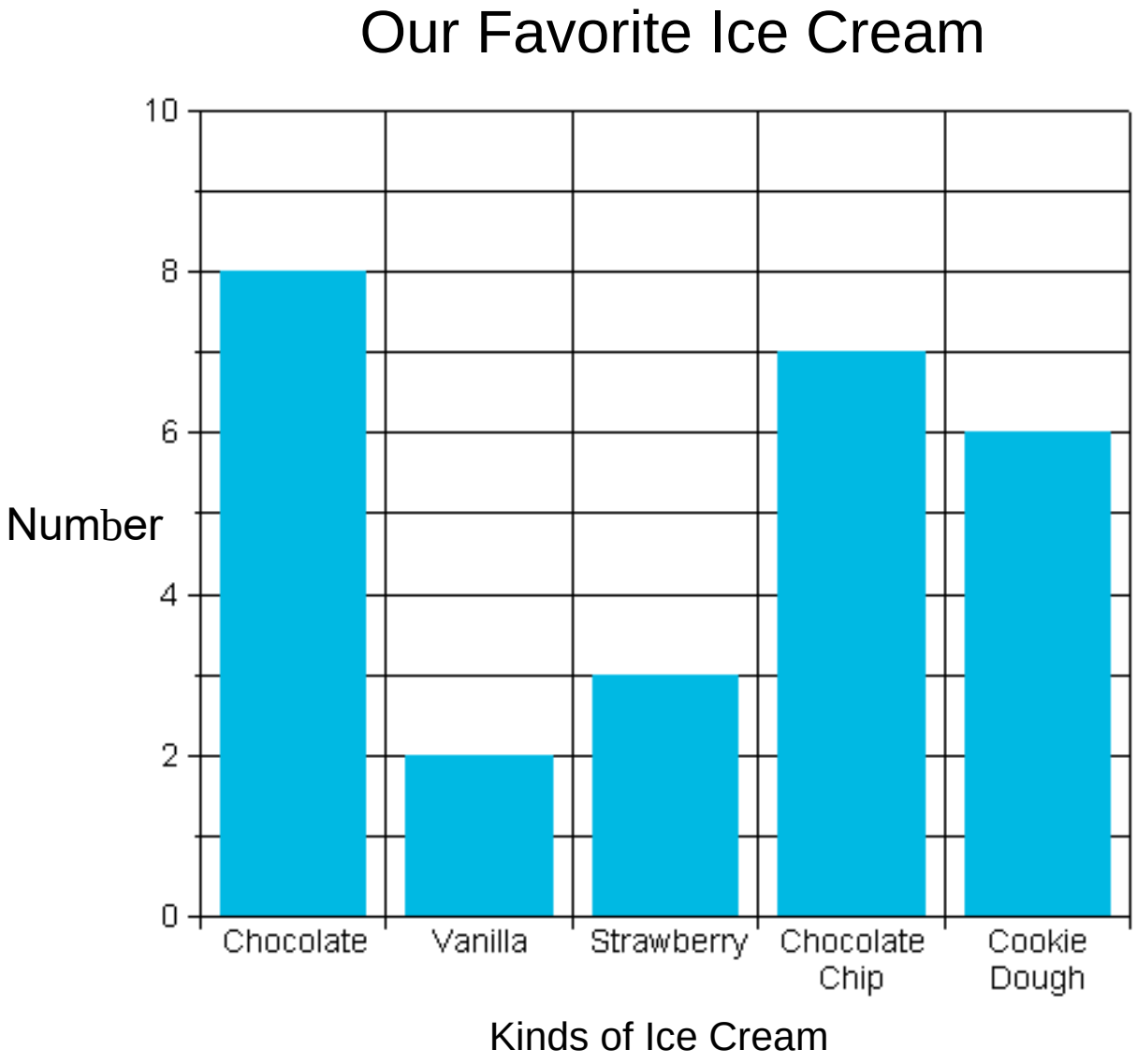
Impossible



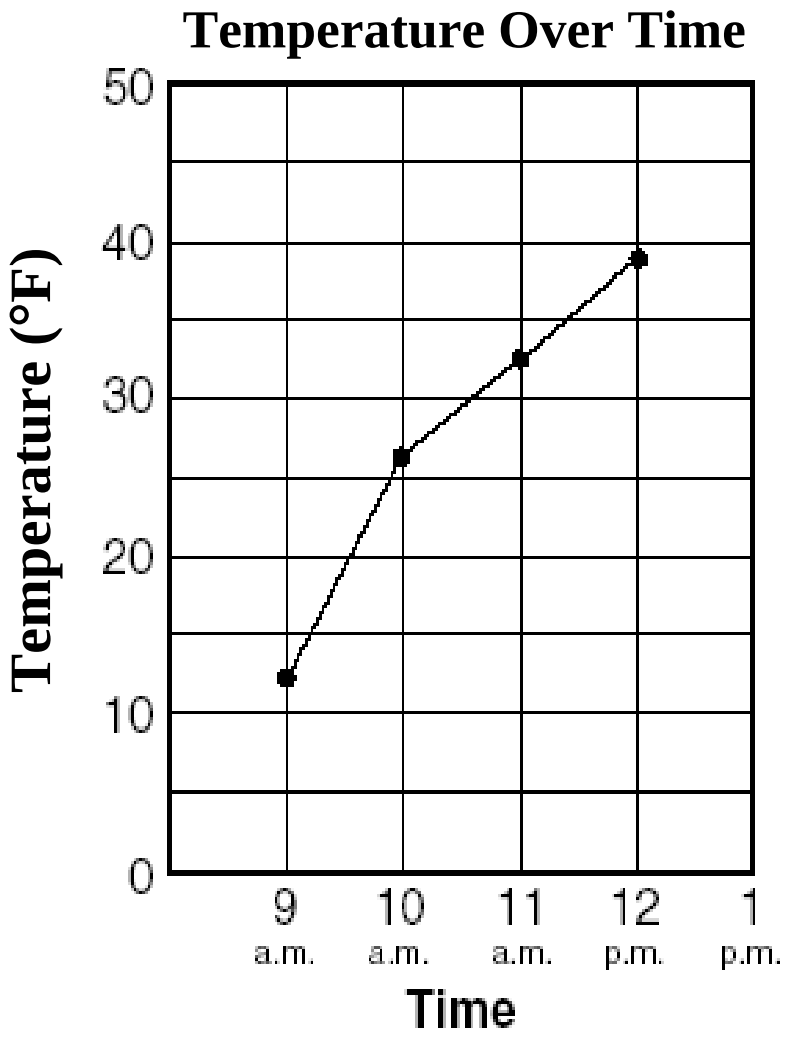
■ is impossible



Bar Graph


Our Favorite Ice Cream
Number
10
8
6
4
2
0
Chocolate
Vanilla
Strawberry
Chocolate Chip
Cookie Dough
Kinds of Ice Cream

Line Graph


Temperature Over Time
Temperature (°F)
50
40
30
20
10
0
9 a.m.
10 a.m.
11 a.m.
12 p.m.
1 p.m.
Time

Pattern:

Growing patterns and input/output table

8, 10, 13, 17, __

Rule: _____	
Input	**Output**
4	11
5	12
6	13
10	17

Rule: _____	
Input	**Output**
145	130
100	85
75	60
50	?

Rule: _____	
Input	**Output**
2	8
4	16
?	20
8	32

Equality

=

$10 + 8 = 36 \div 2$

$8 \times 4 = 190 - 158$

$16 \times 3 = 8 \times 6$

Inequality

$\neq$

$5 + 6 \neq 4 + 8$

$9 - 4 \neq 3 \times 3$

$5 \text{ x } 7 \neq 35 + 5$

Expression

a representation of a quantity

5

$4 + 3$

$8 - 2$

2×7