

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

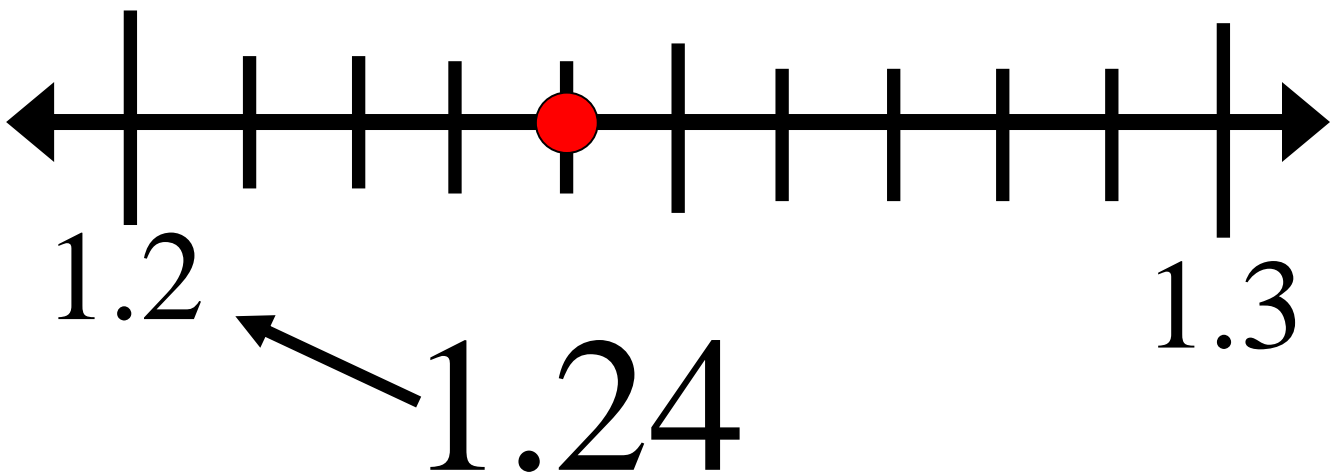
Decimal Place Value Position

Ones		Tenths	Hundredths	Thousandths
3	.	7	2	1

decimal point



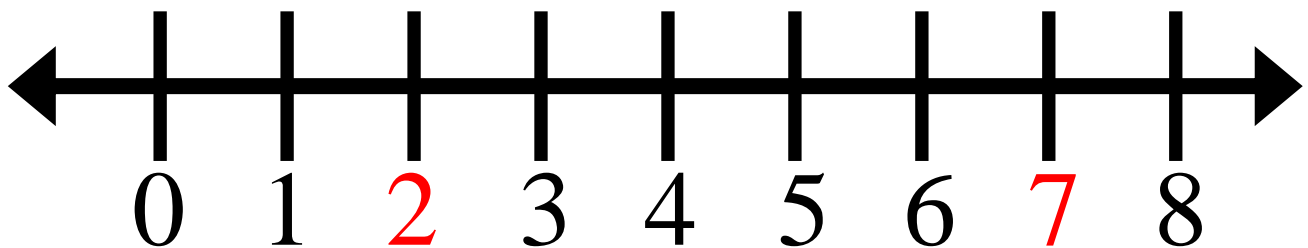
Round



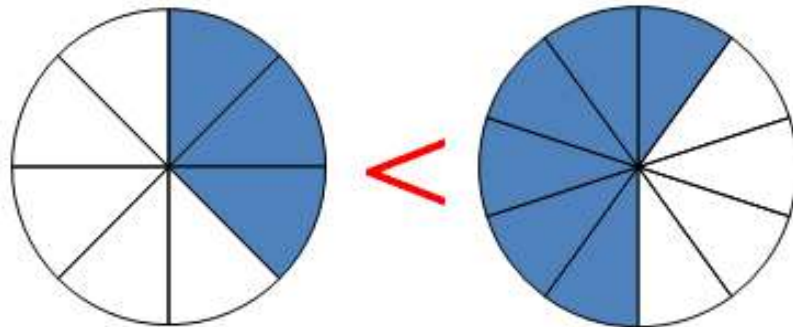
Round 1.24 to the
nearest tenth.

Less than

<



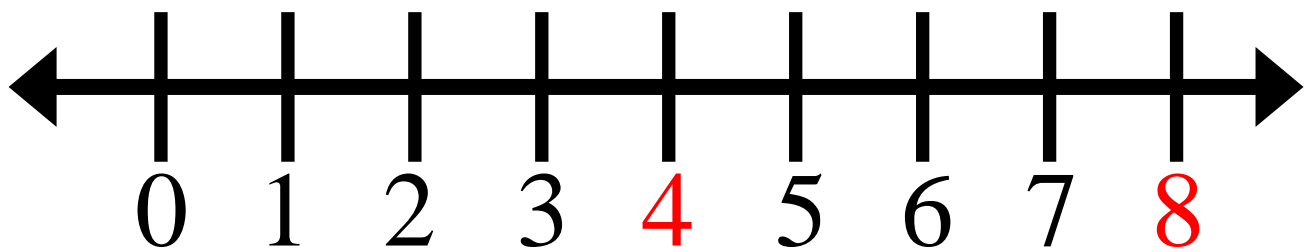
$$2 < 7$$



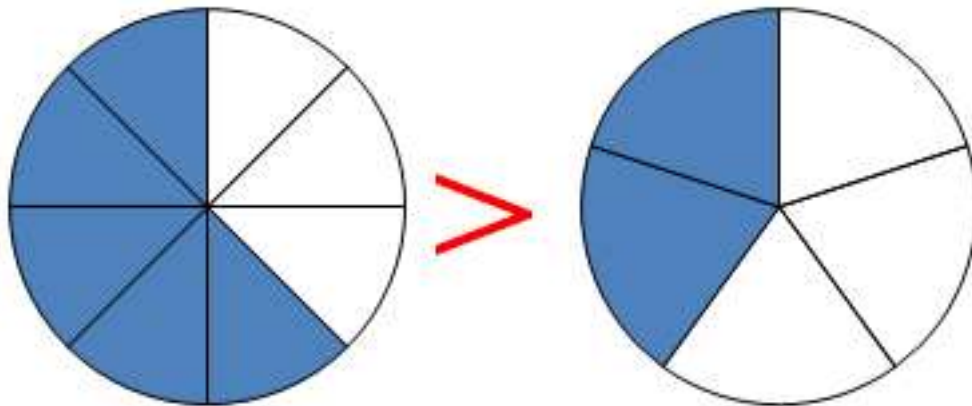
$$\frac{3}{8} < \frac{6}{10}$$

Greater than

>



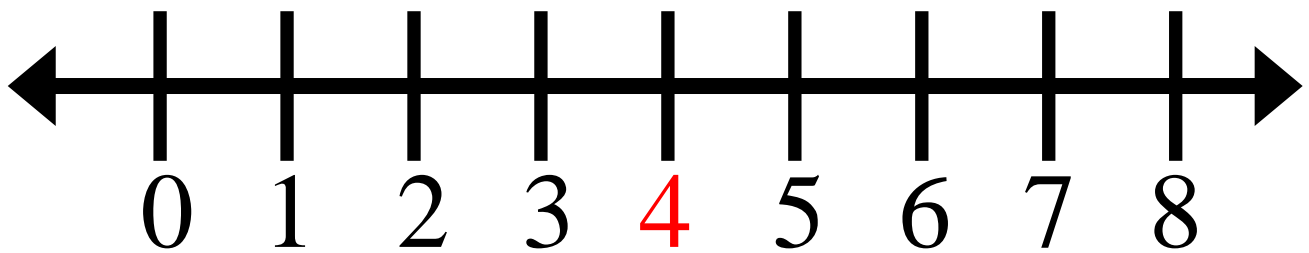
$$8 > 4$$



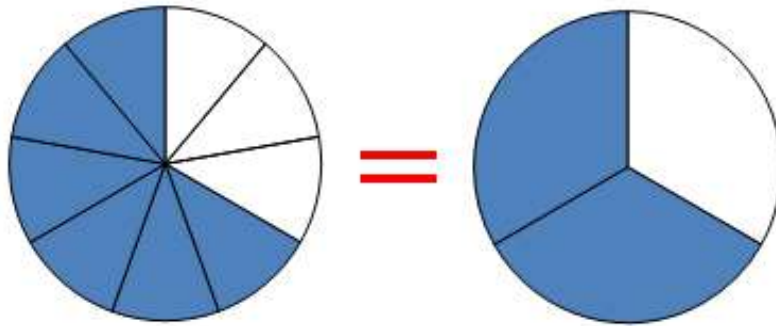
$$\frac{5}{8} > \frac{2}{5}$$

Equal to

=



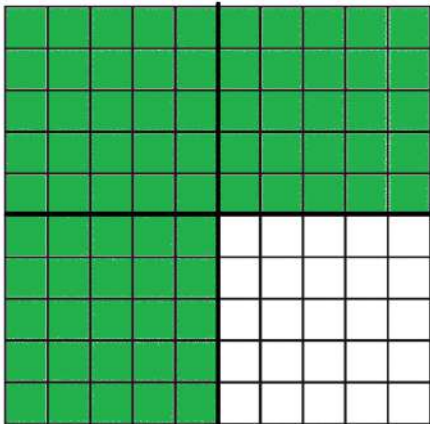
$$4 = 4$$



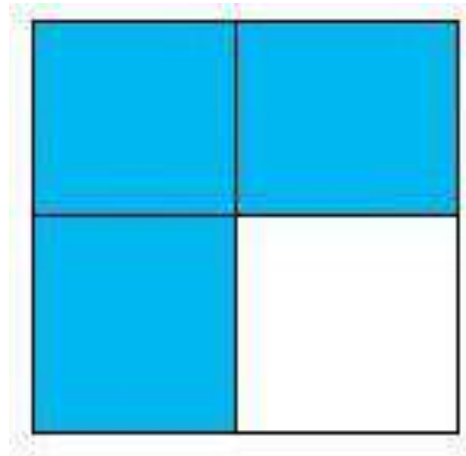
$$\frac{6}{9} = \frac{2}{3}$$

Equivalent

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



=



0.75

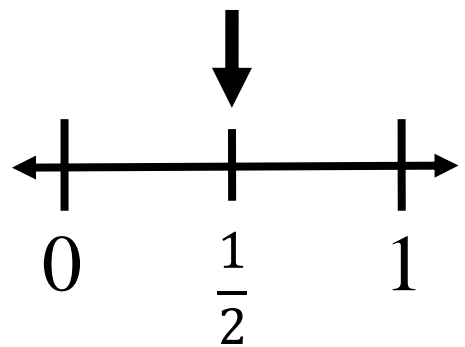
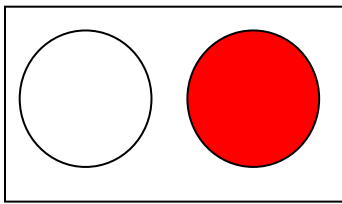
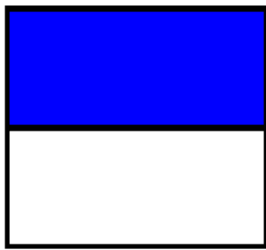
=

$\frac{3}{4}$

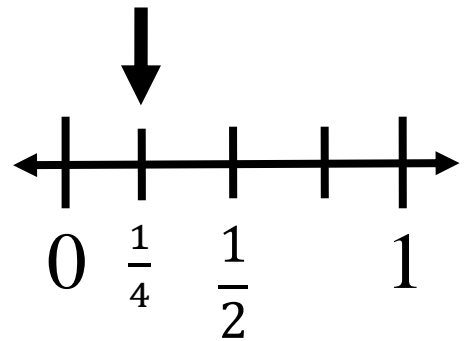
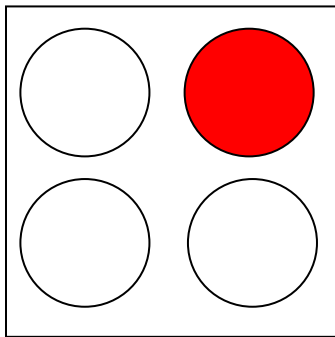
Fraction:

Models for one-half and one-fourth

$\frac{1}{2}$



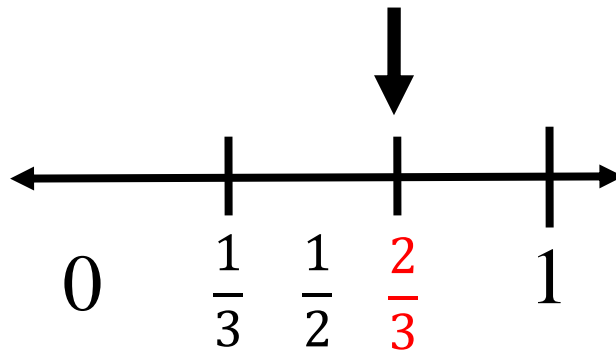
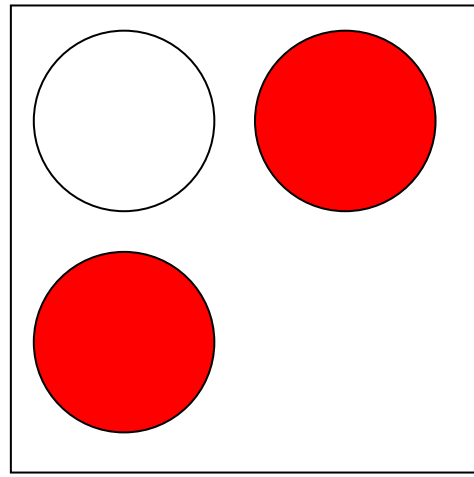
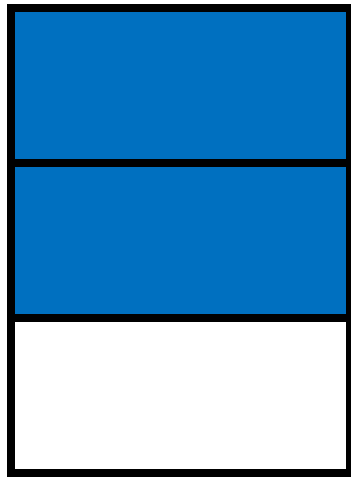
$\frac{1}{4}$



Fraction:

Models for two-thirds

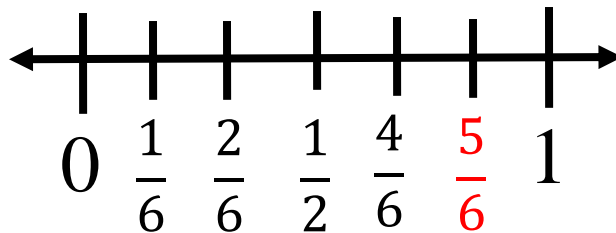
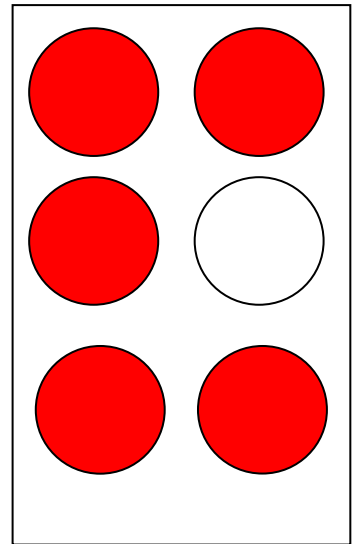
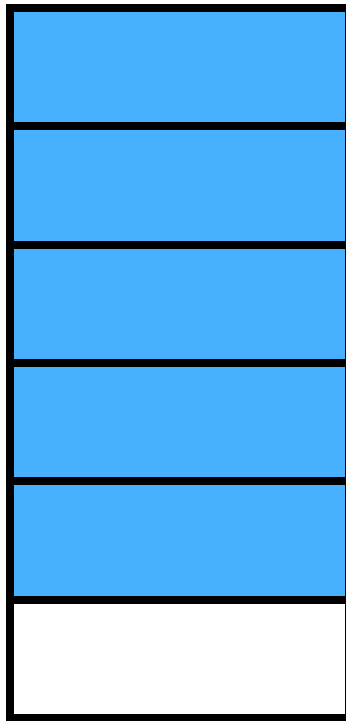
$\frac{2}{3}$



Fraction:

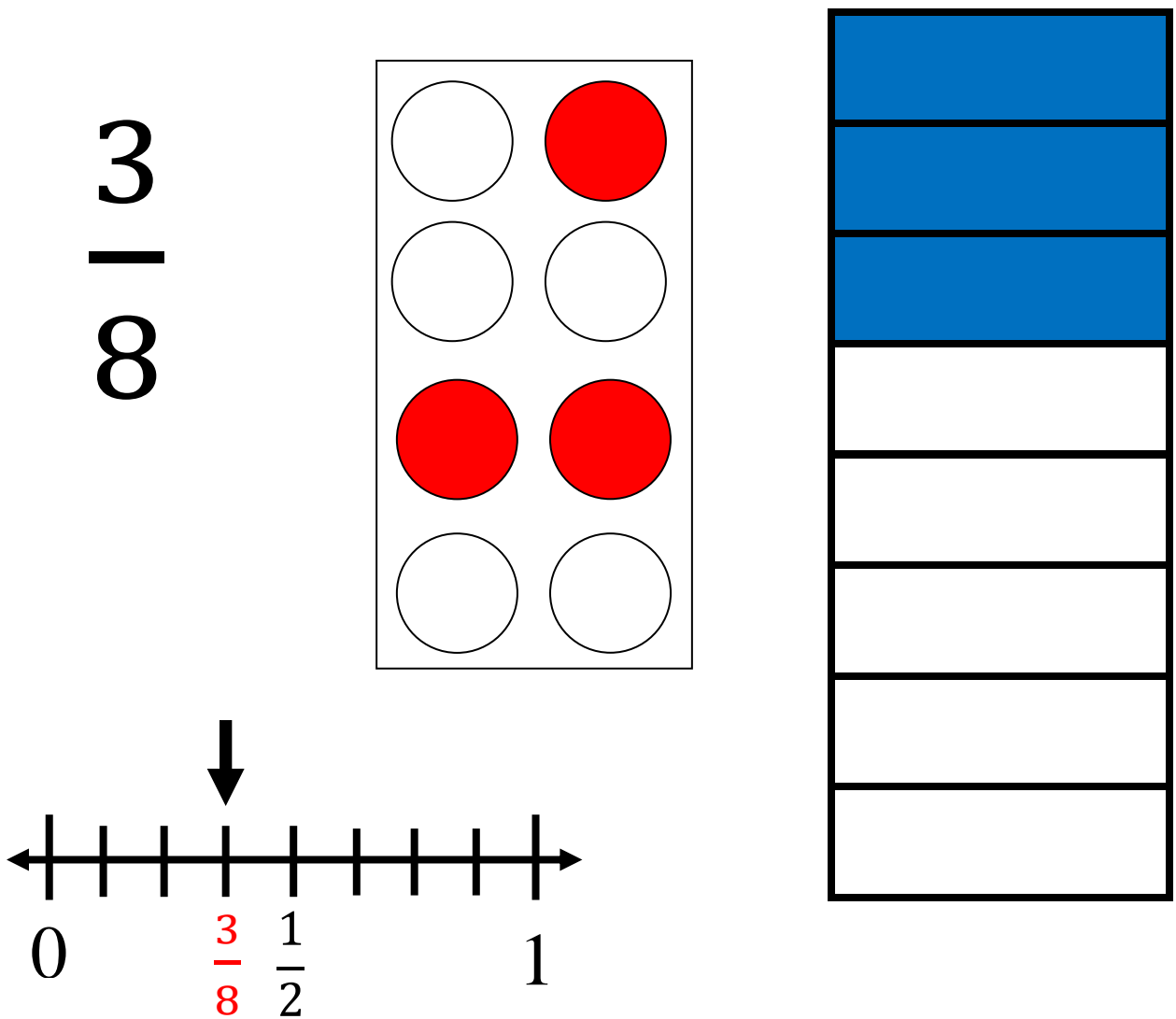
Models for five-sixths

$\frac{5}{6}$



Fraction:

Models for three-eighths

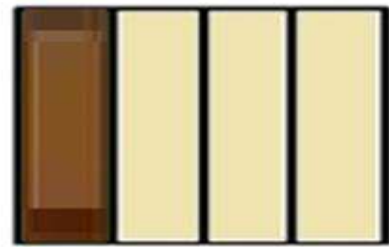


Numerator/ Denominator

numerator **2**
(number of equal
parts being
considered)

3 **denominator**
(number of equal
parts in the whole)

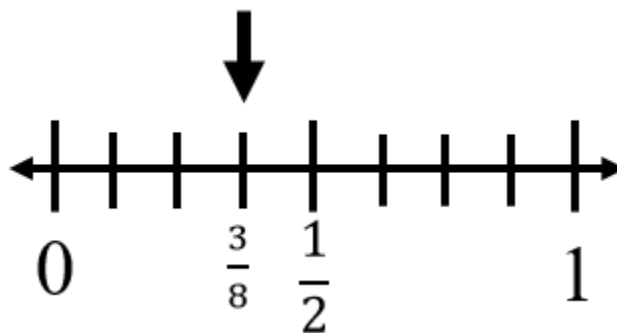
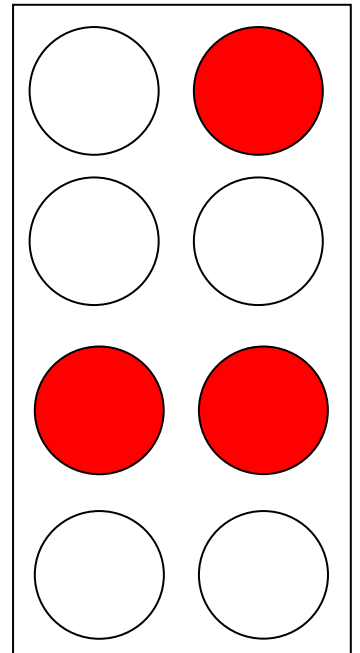
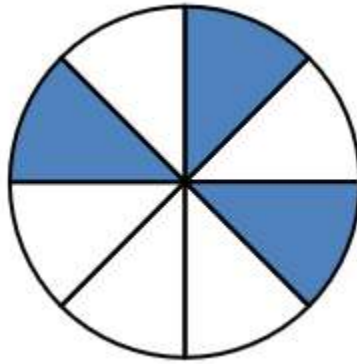
The candy bar was divided into 4 equal parts. Three friends ate 3 pieces of the candy bar, so $\frac{3}{4}$ of the candy bar has been eaten.



Proper Fraction:

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

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

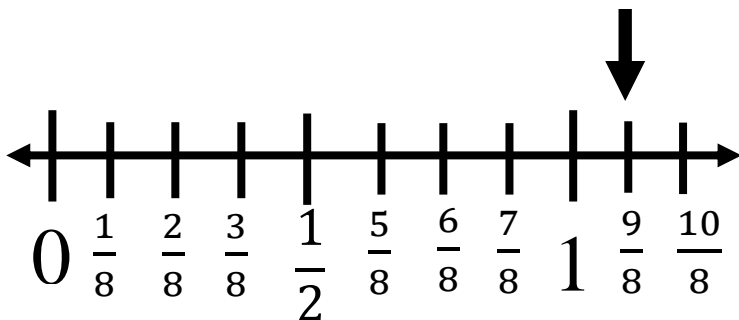
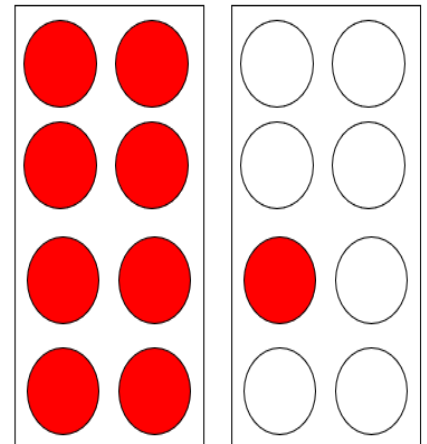
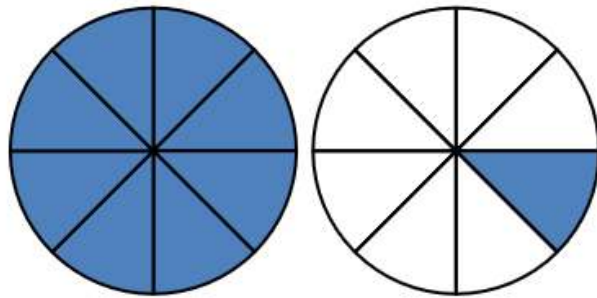


Improper Fraction:

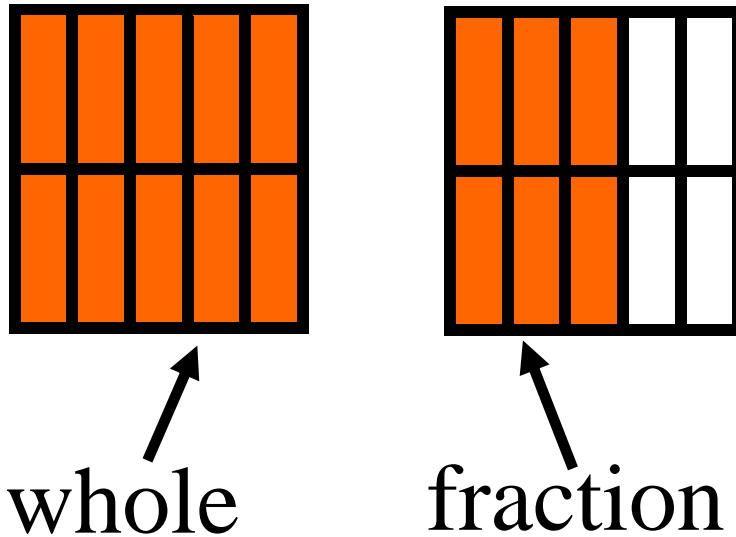
Fraction greater than or
equal to one

(numerator is equal to or greater
than the denominator)

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

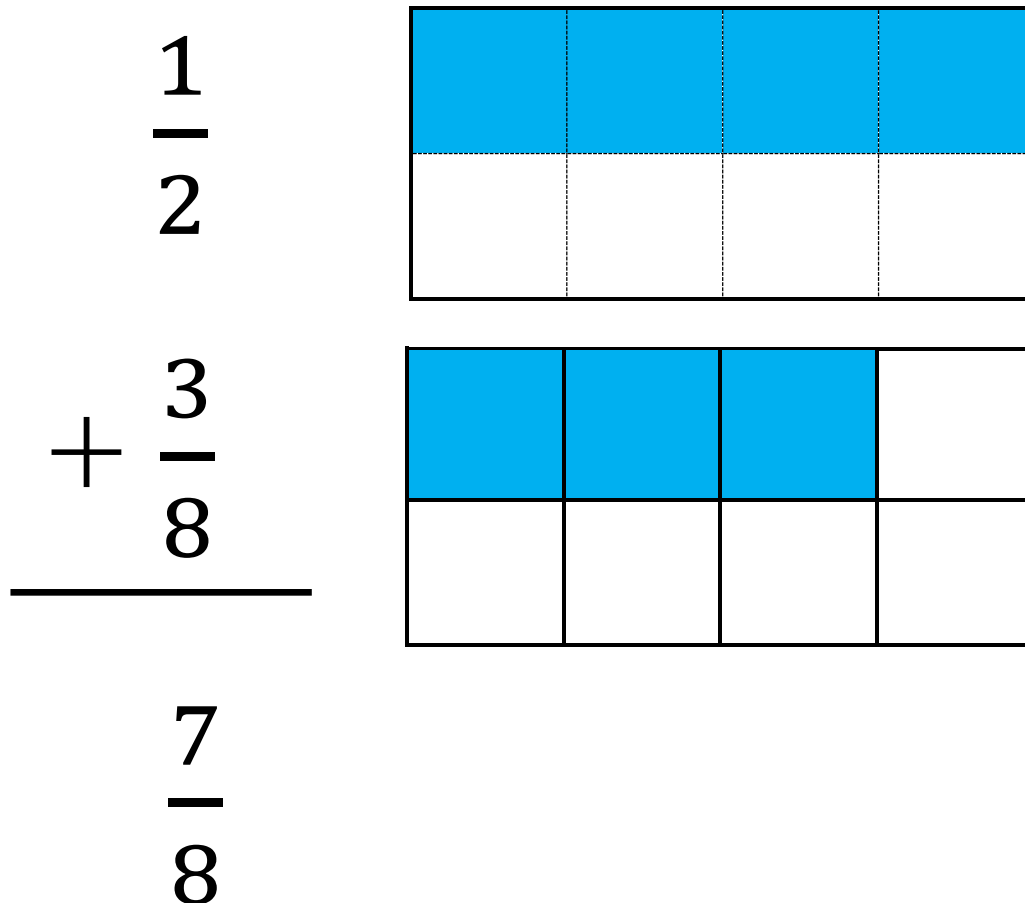


Mixed Number

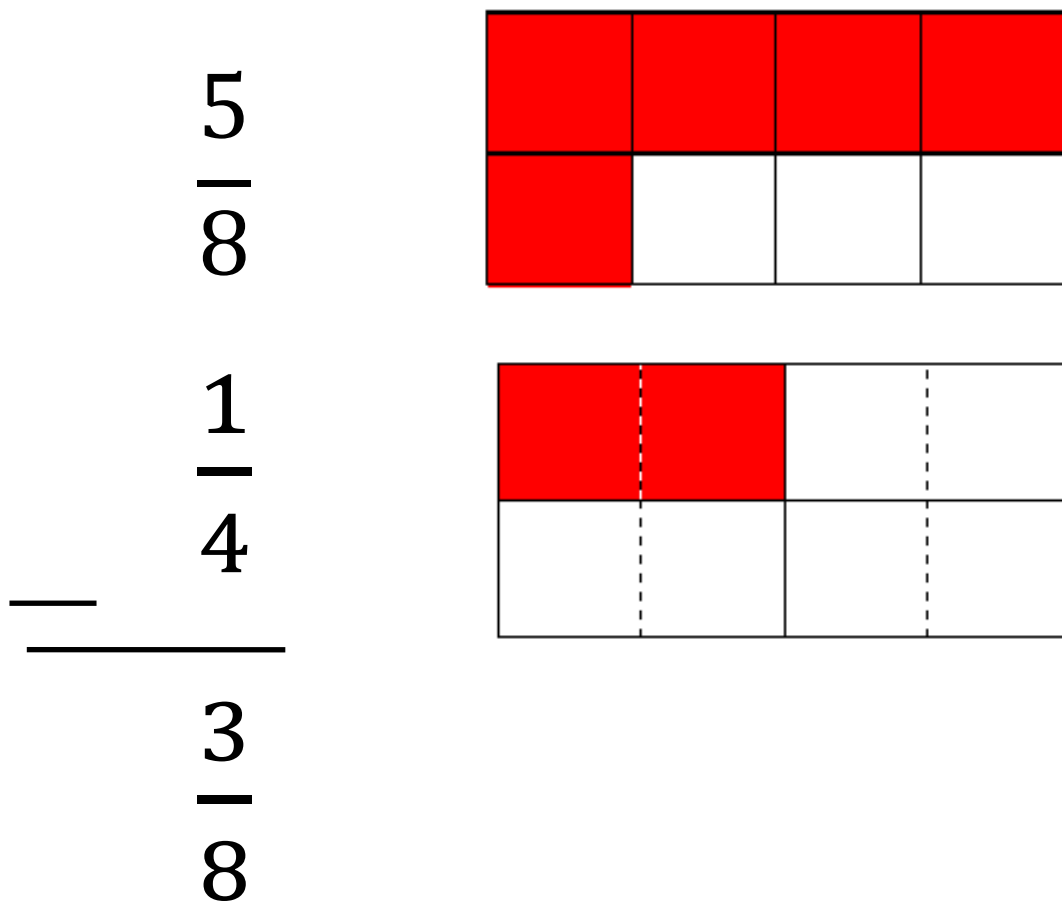


$$1\frac{6}{10}$$

Fraction: Addition



Fraction: Subtraction



Multiple

Multiples of 5

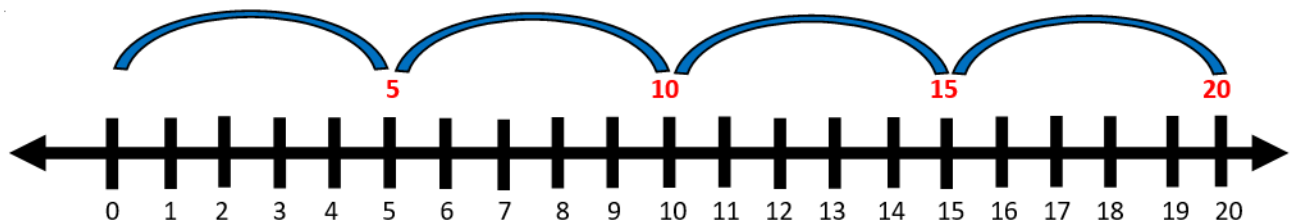
$$1 \times 5 = 5$$

$$2 \times 5 = 10$$

$$3 \times 5 = 15$$

$$4 \times 5 = 20$$

5, 10, 15, 20, ...



Least Common Multiple

Multiples of 12	Multiples of 18
$1 \times 12 = 12$	$1 \times 18 = 18$
$2 \times 12 = 24$	$2 \times 18 = 36$
$3 \times 12 = 36$	$3 \times 18 = 54$
$4 \times 12 = 48$	

LCM is 36.

Factor

Factors of 12

1, 2, 3, 4, 6, 12

$$1 \times 12$$

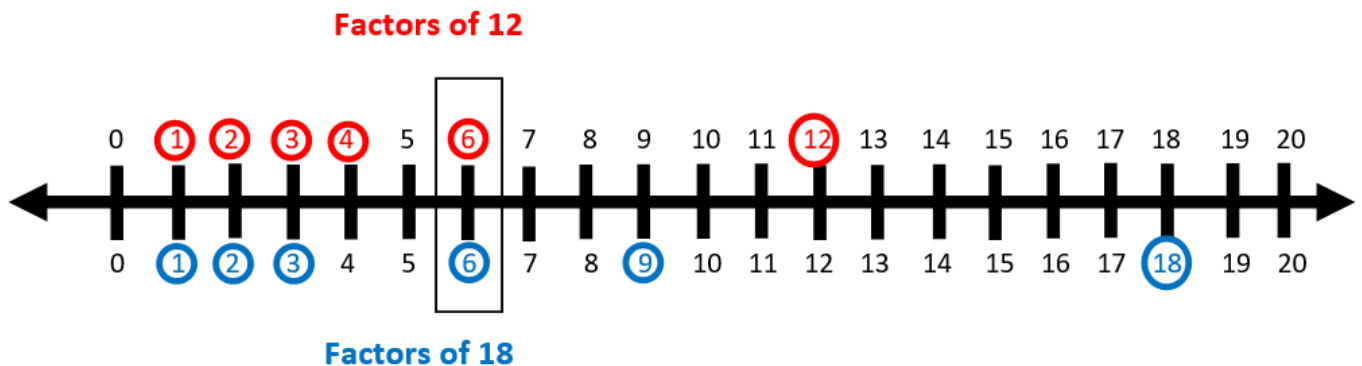
$$2 \times 6$$

$$3 \times 4$$

Greatest Common Factor

Factors of 12	Factors of 18
$1 \times 12 = 12$	$1 \times 18 = 18$
$2 \times 6 = 12$	$2 \times 9 = 18$
$3 \times 4 = 12$	$3 \times 6 = 18$
1, 2, 3, 4, 6 , 12	1, 2, 3, 6 , 9, 18

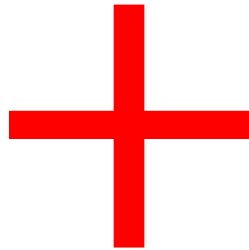
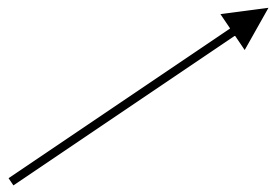
GCF is 6.



Addition

$$4.65 + 1.74 = 6.39$$

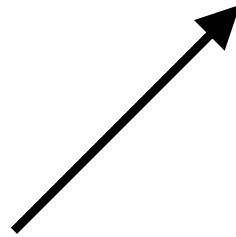
sum



plus

Subtraction

$$4.25 - 1.64 = 2.61$$



difference



minus

Multiply:

Product

$$32 \times 48 = 1,536$$

product



X

Divide:

Quotient

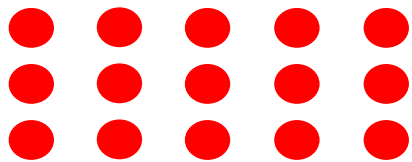
$$14 \overline{) 280} \begin{array}{r} 20 \\ \hline \end{array}$$

$$\frac{280}{14} = 20$$

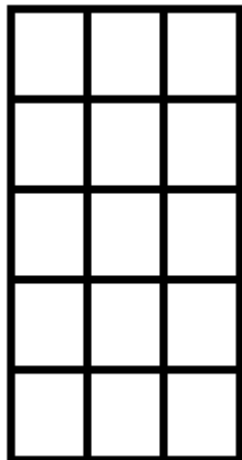
$$280 \div 14 = 20$$

Multiplication: Array Model

(an arrangement of objects in rows and columns)

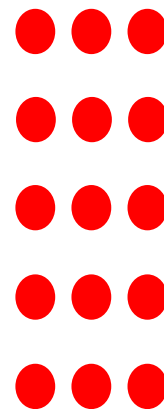


$$3 \times 5$$

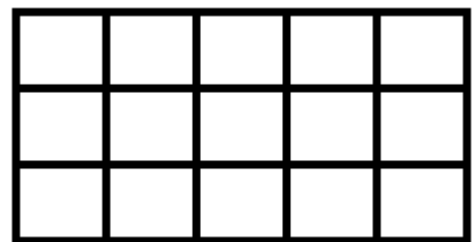


5 rows of 3

$$5 \times 3$$

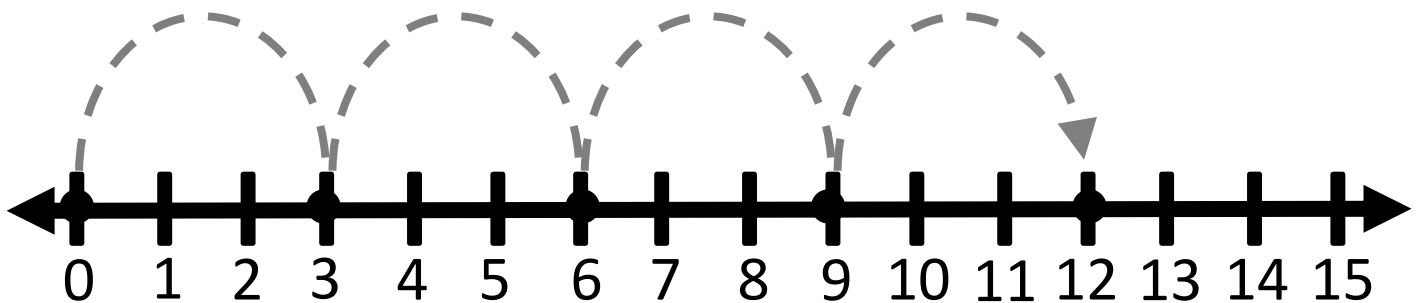


3 rows of 5



Multiplication: Number Line Model

$$4 \times 3$$

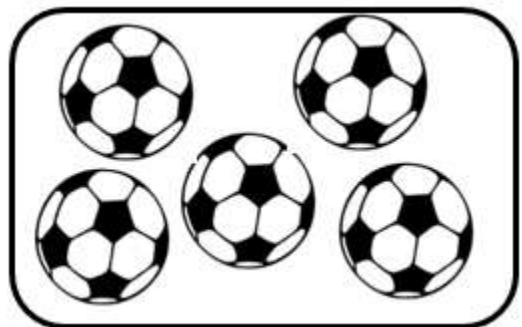
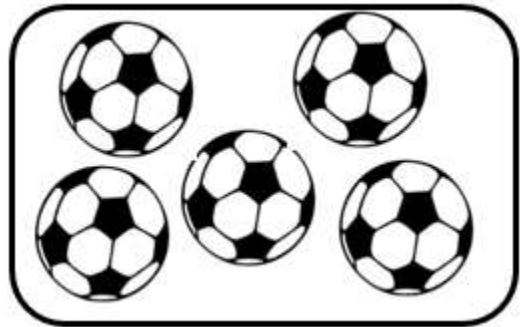


$$4 \times 3 = 12$$

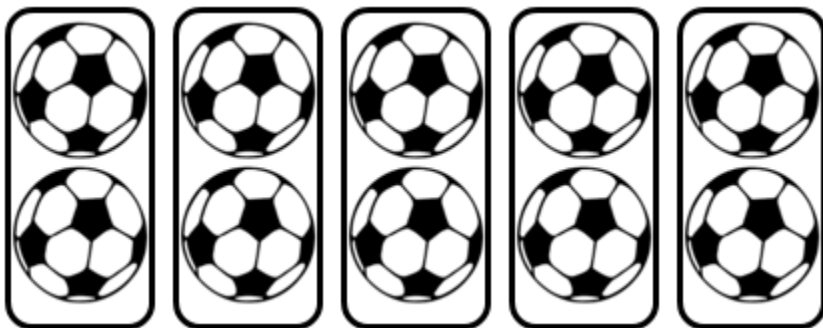
Multiplication: Set Model

$$2 \times 5$$

2 groups of 5
soccer balls
in each group



$$5 \times 2$$

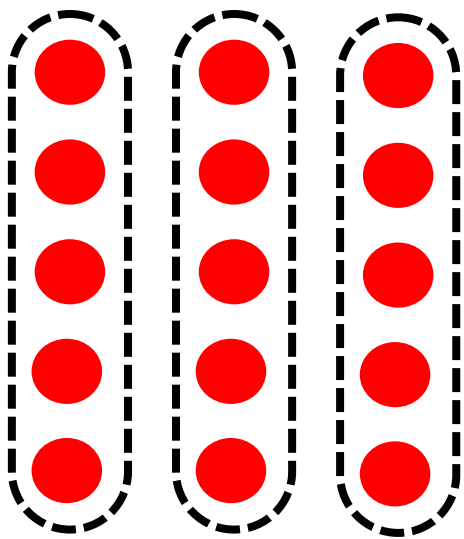
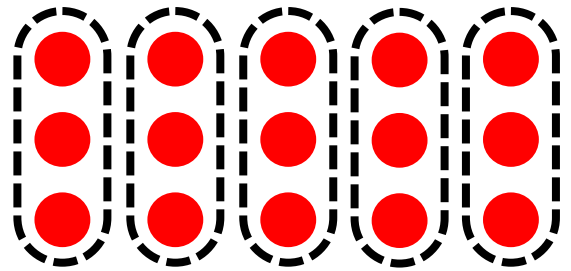


5 groups of 2
soccer balls
in each group

Division:

Array Model

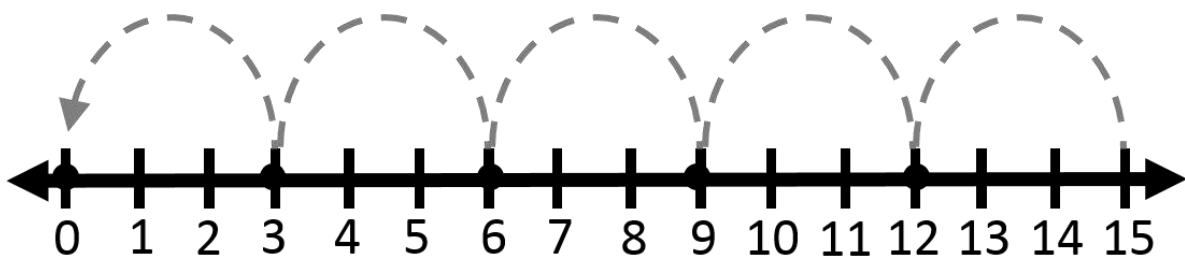
15 candies – if each friend is given 3, there is enough to share with 5 friends



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

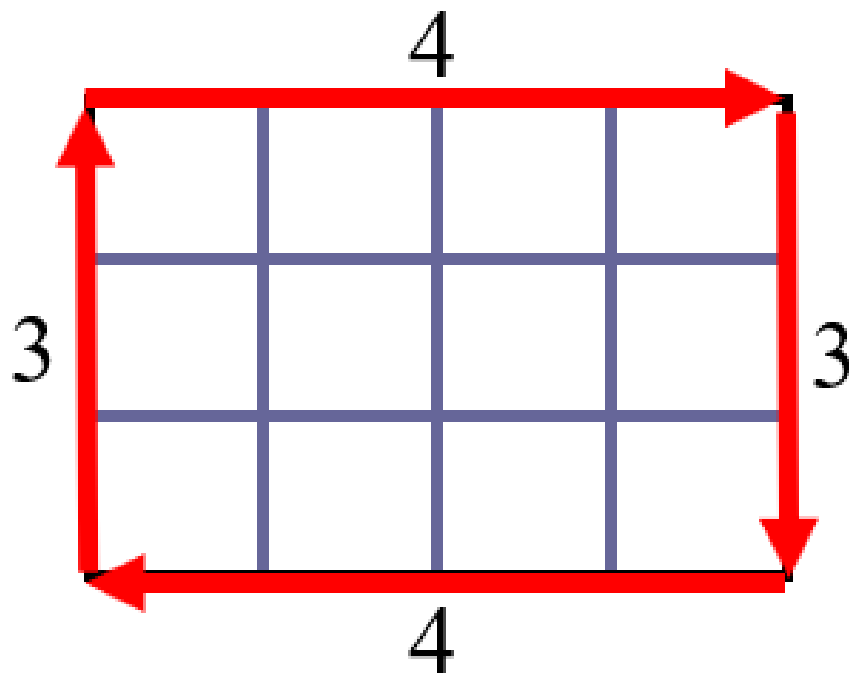
1	2	3	4
5	6	7	8
9	10	11	12

length x width

$$3 \times 4 = 12$$

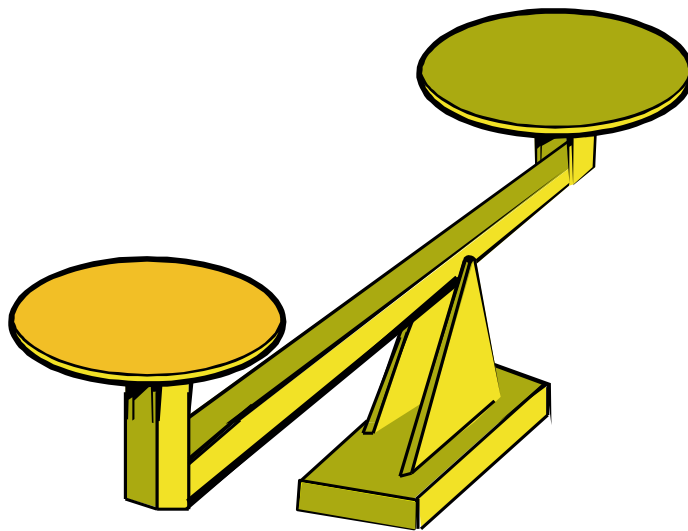
12 square units

Perimeter: Units



$$3 + 4 + 3 + 4$$
$$14 \text{ units}$$

Balance Scale: Weight/Mass



weight/mass

Scale:

Weight/Mass



weight/mass

Ounce (oz.): Pounds



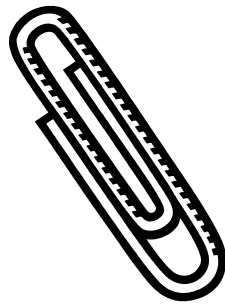
16 ounces = 1 pound

Pound (lb): Ounces



1 pound = 16 ounces

Gram (g): Kilograms



1,000 grams = 1 kilogram

Kilogram

(kg):

Grams

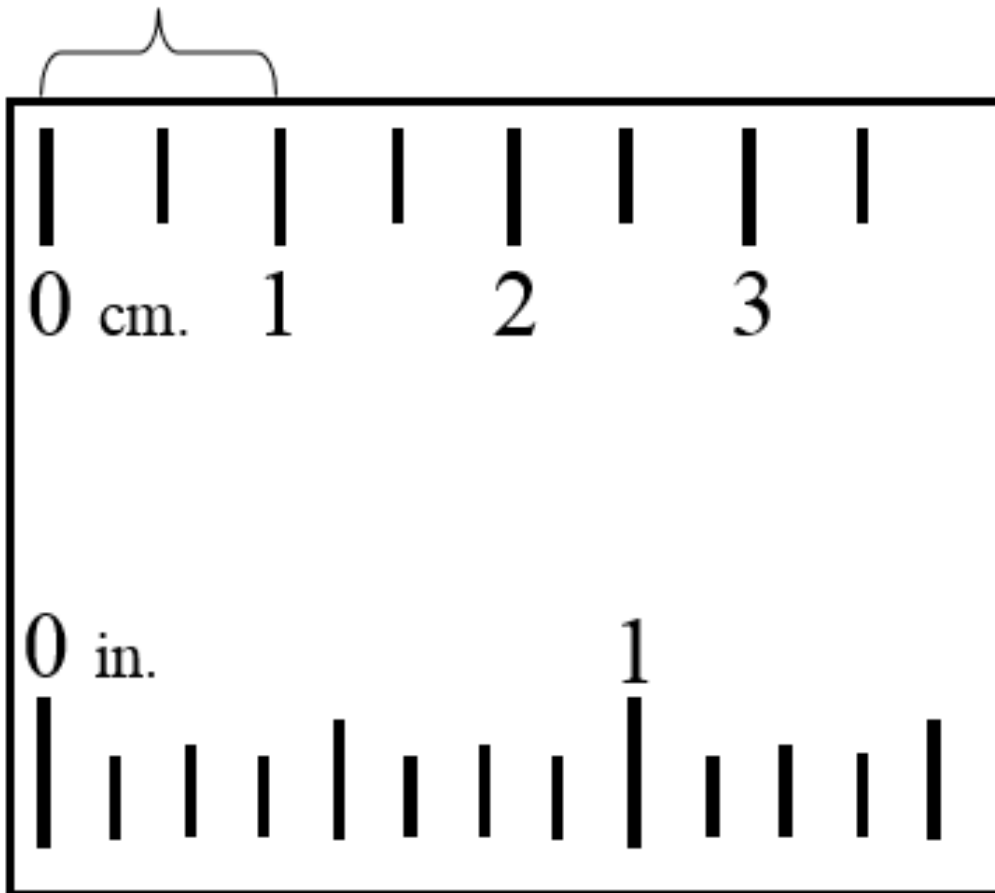


1 kilogram = 1,000 grams

Ruler:

Centimeter and Inch

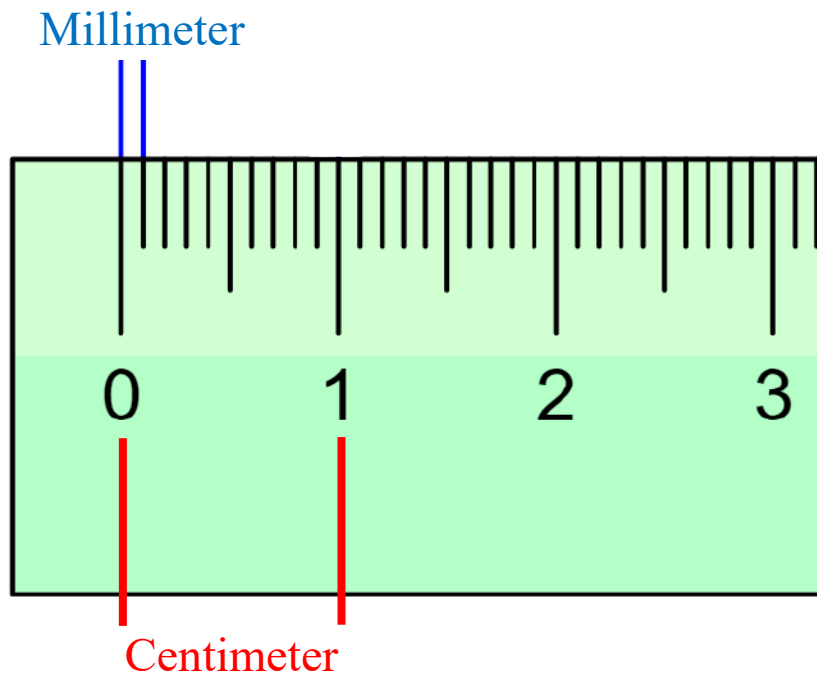
one centimeter



one 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

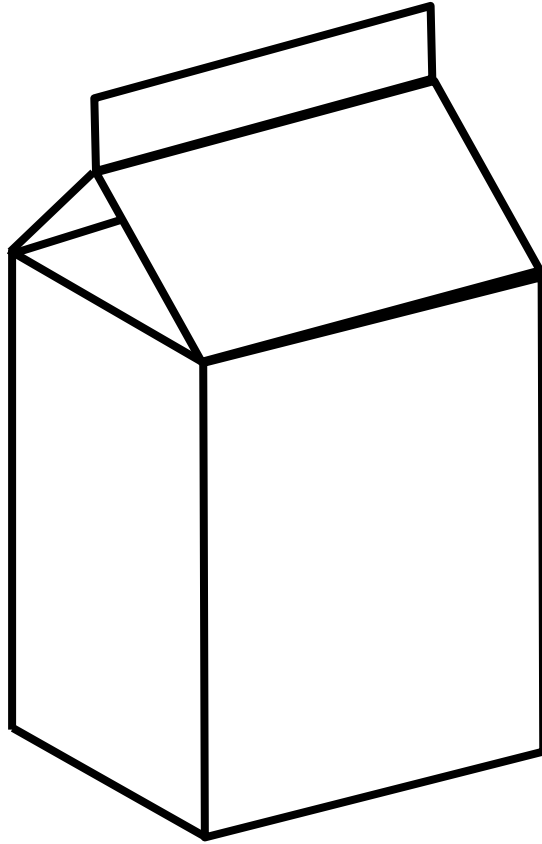
Cup: Ounces



1 cup = 8 ounces

Pint:

Cups and Ounces



1 pint = 2 cups
1 pint = 16 ounces

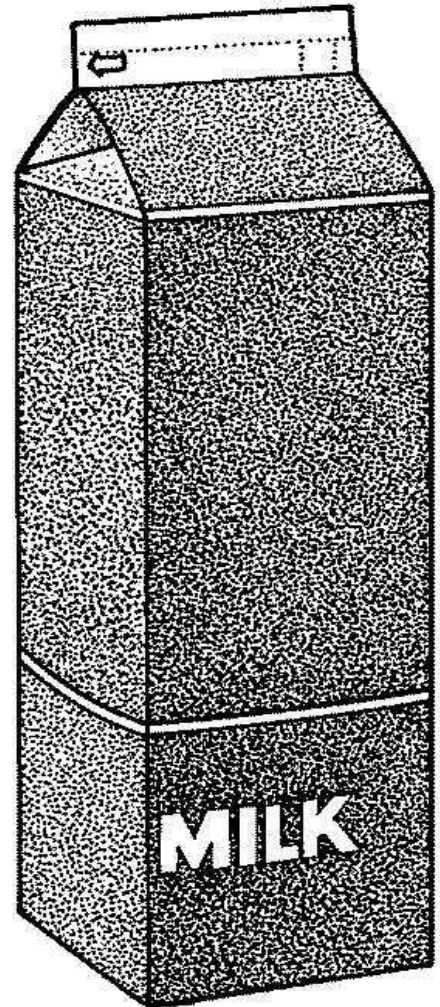
Quart:

Pints, Cups, and Ounces

1 quart = 2 pints

1 quart = 4 cups

1 quart = 32 ounces



Gallon: Ounces



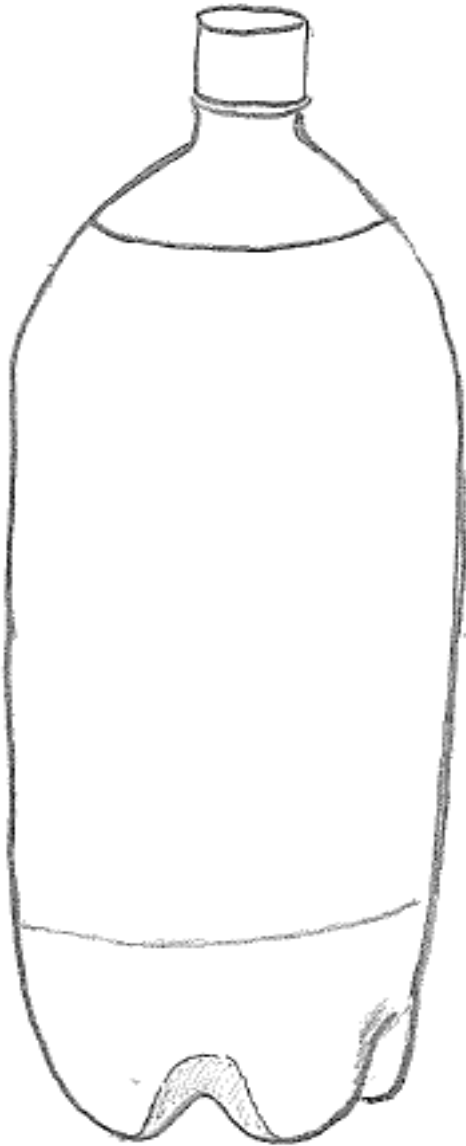
1 gallon = 64 ounces

1 gallon = 16 cups

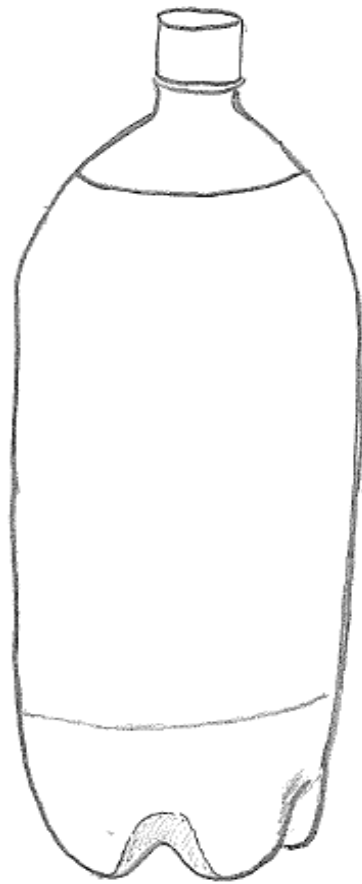
1 gallon = 8 pints

1 gallon = 4 quarts

Liter



2 liter

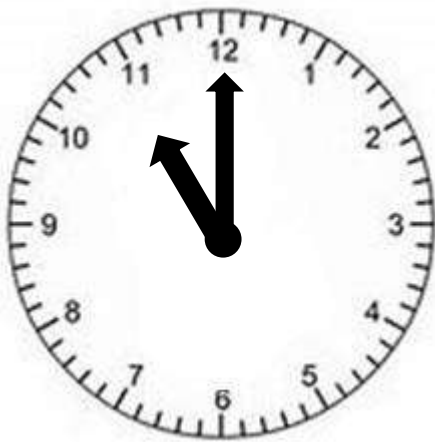


1 liter

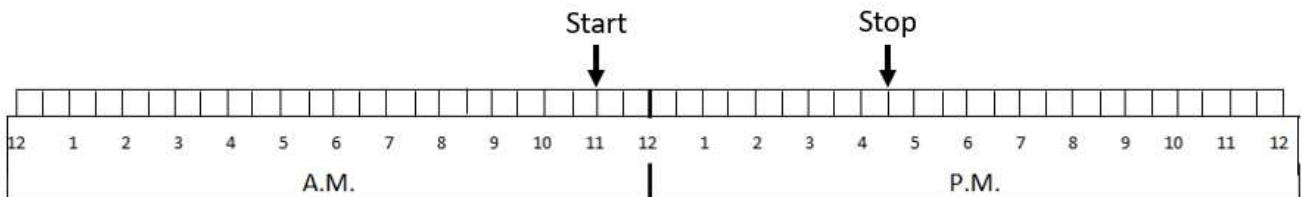
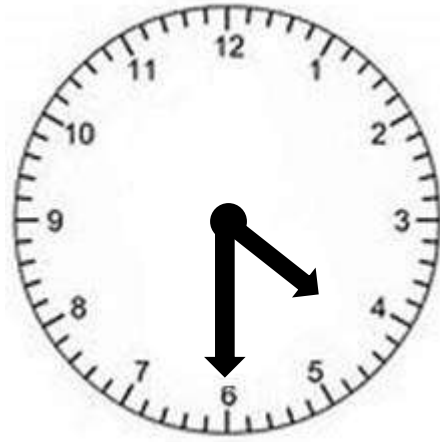
Elapsed Time

amount of time that has passed between two given times

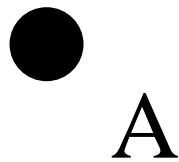
START



STOP

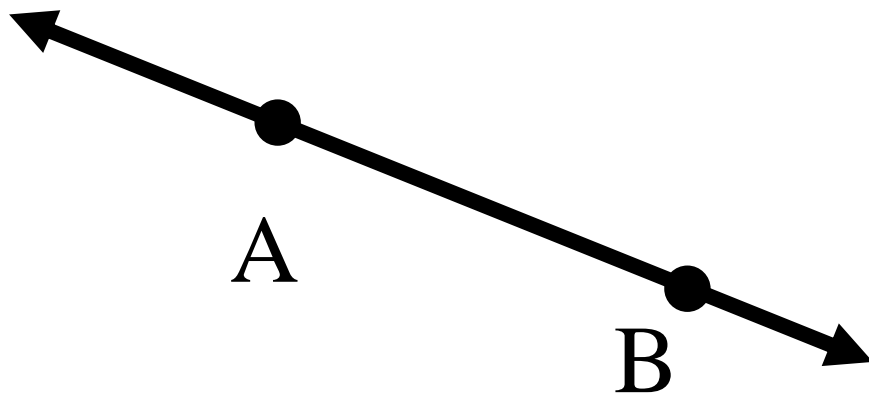


Point



point A

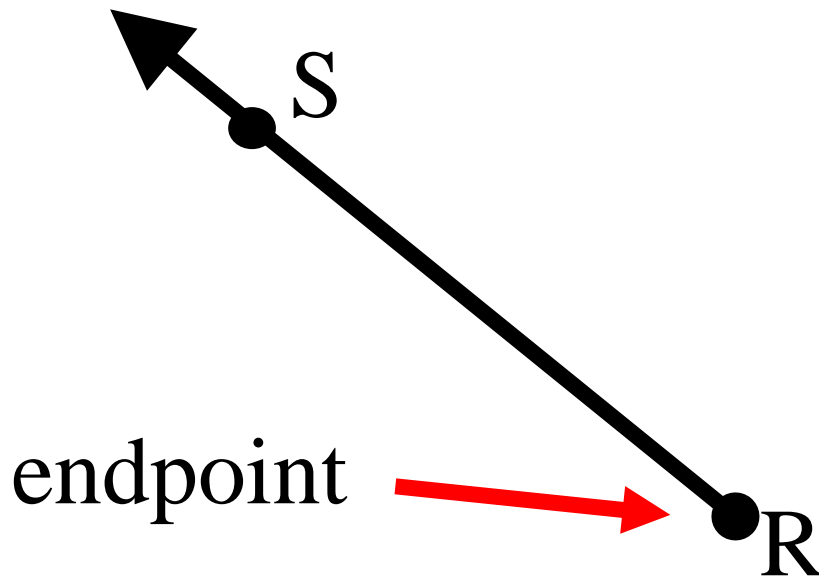
Line



line AB

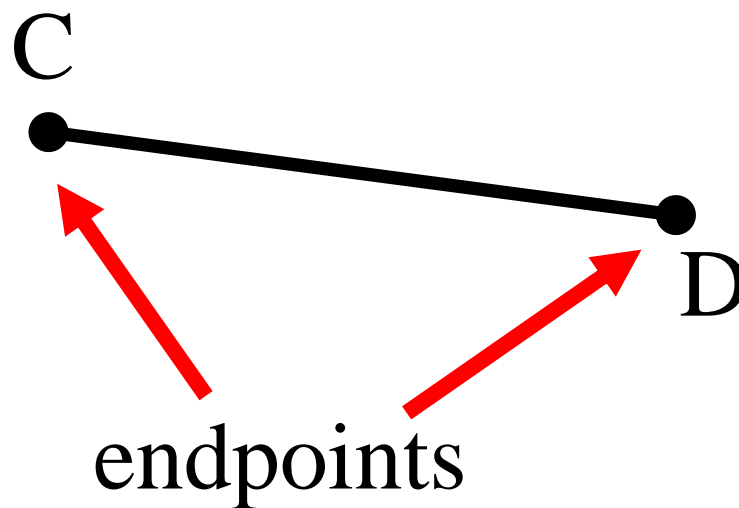
\overleftrightarrow{AB}

Ray: Endpoint



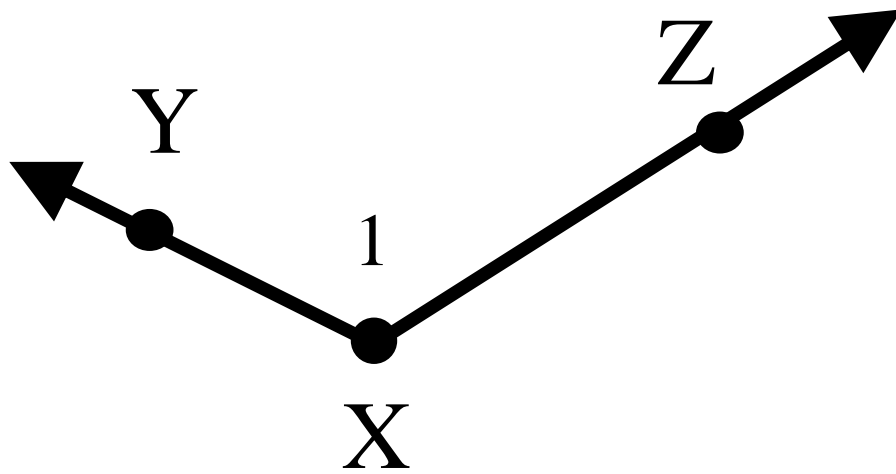
ray RS
 \overrightarrow{RS}

Line Segment: Endpoint



line segment CD
 \overline{CD}

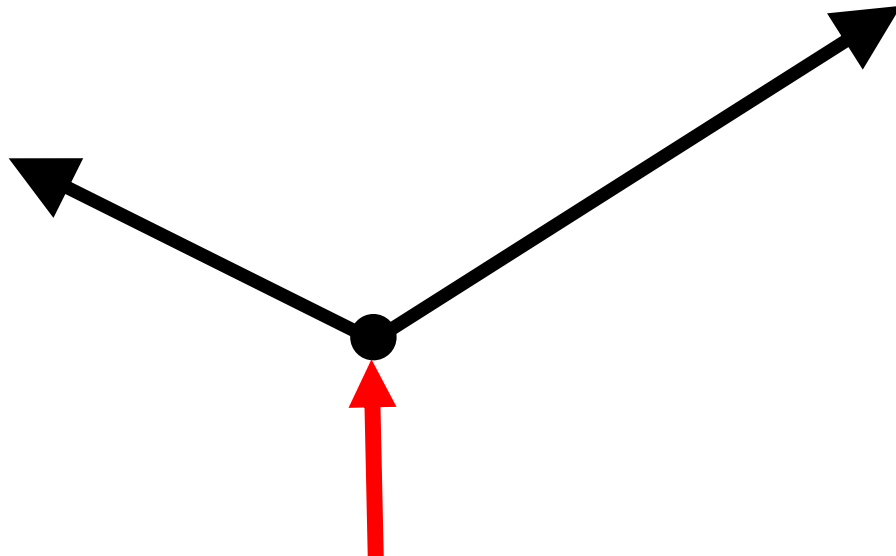
Angle



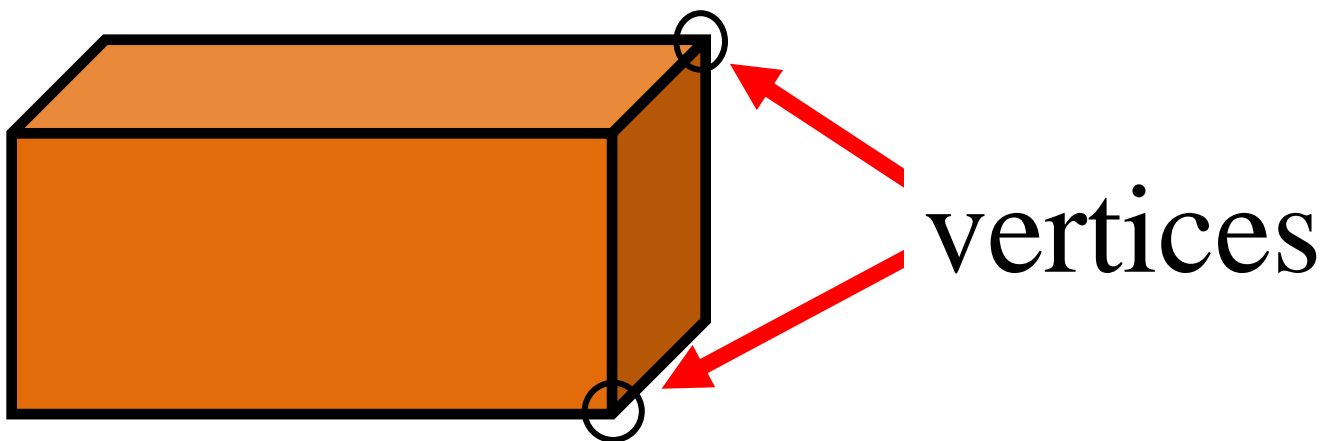
angle YXZ , angle X , or
angle 1

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

Vertex

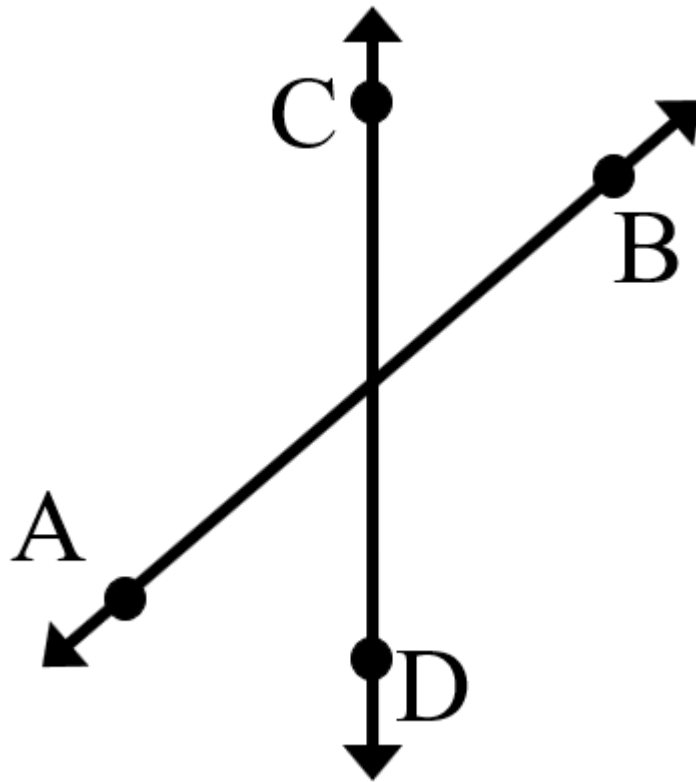


vertex

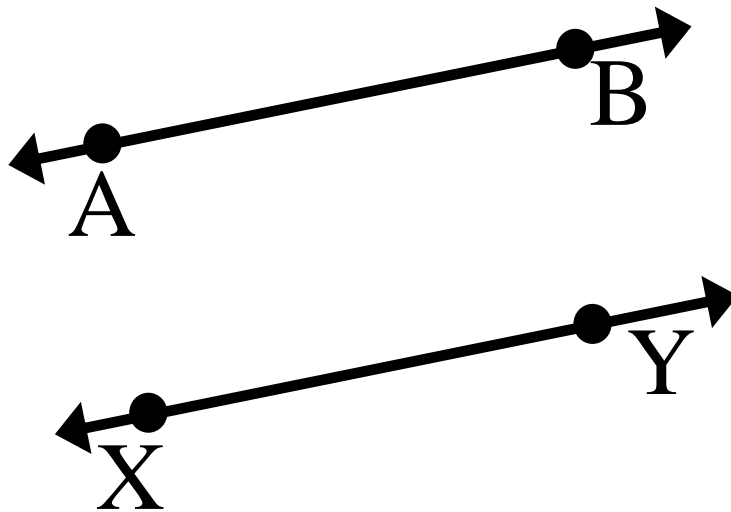


vertices

Intersecting Lines



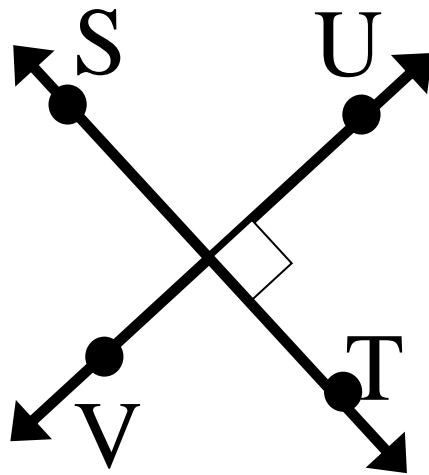
Parallel Lines



line AB is parallel to line XY

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

Perpendicular Lines



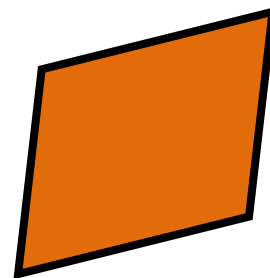
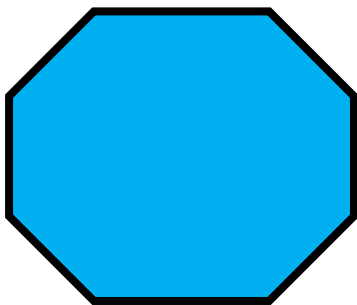
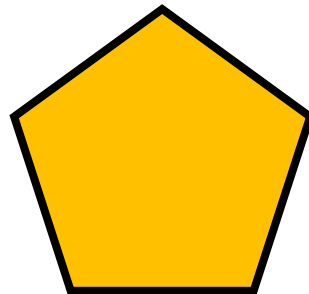
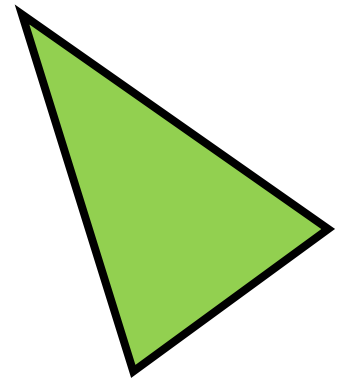
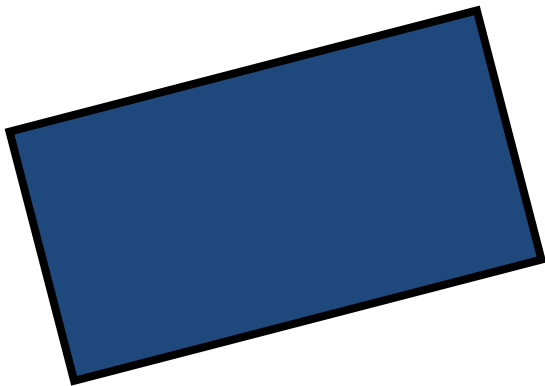
line ST is perpendicular to line UV

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

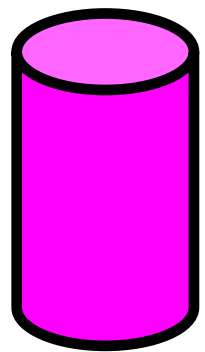
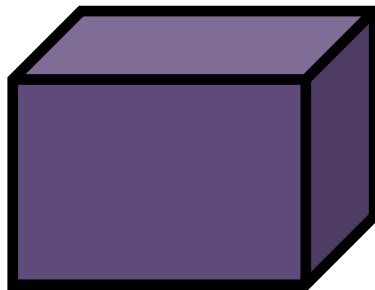
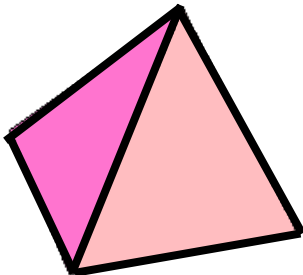
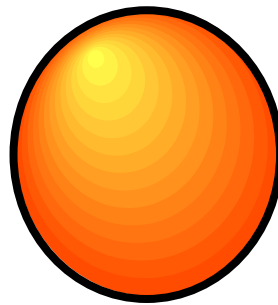
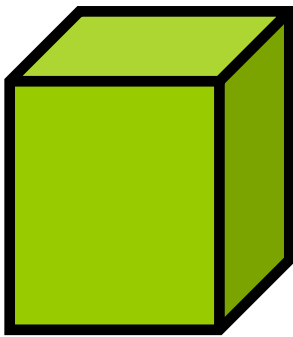
Symbolic Notations

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

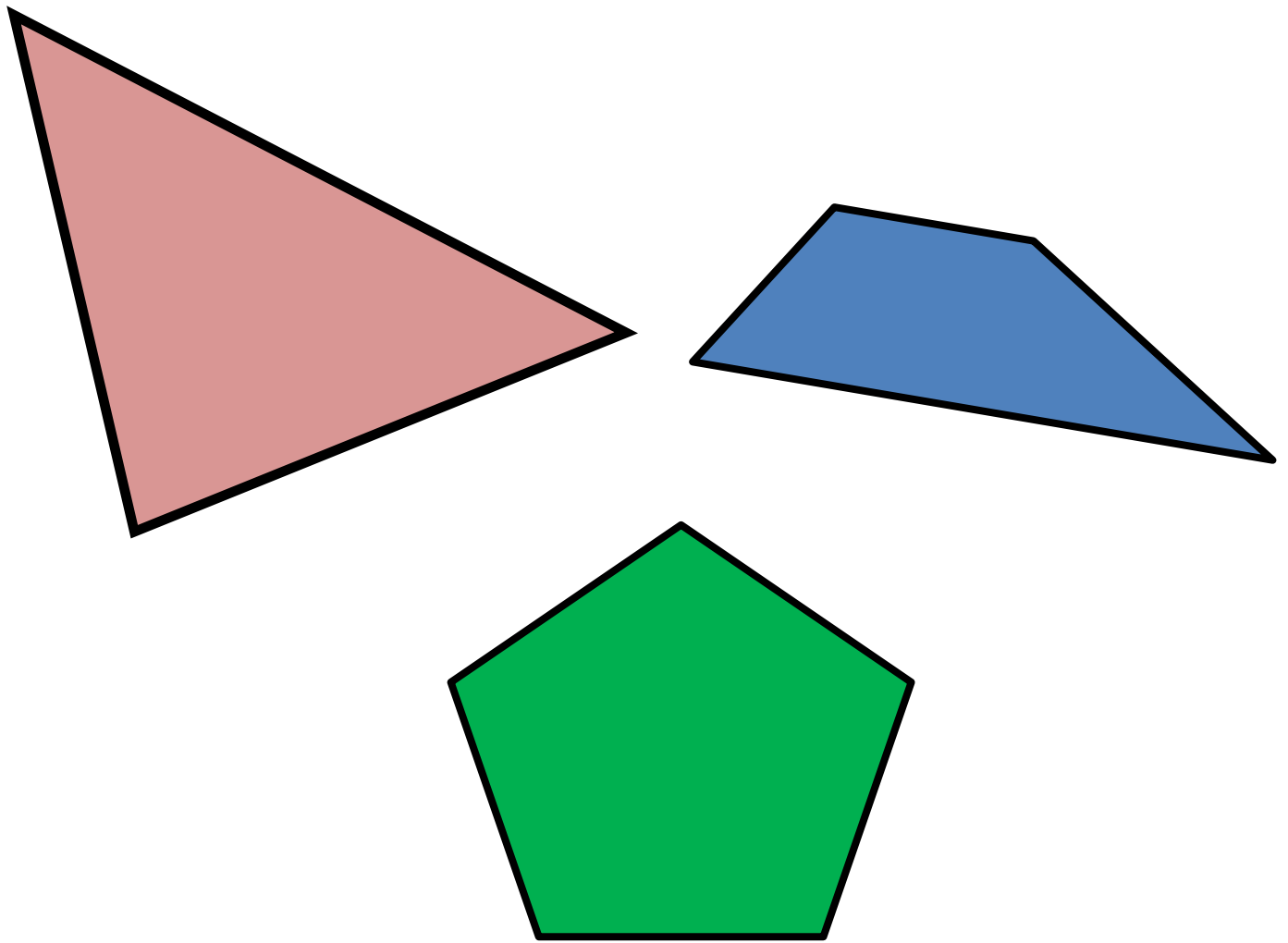


Solid Figures



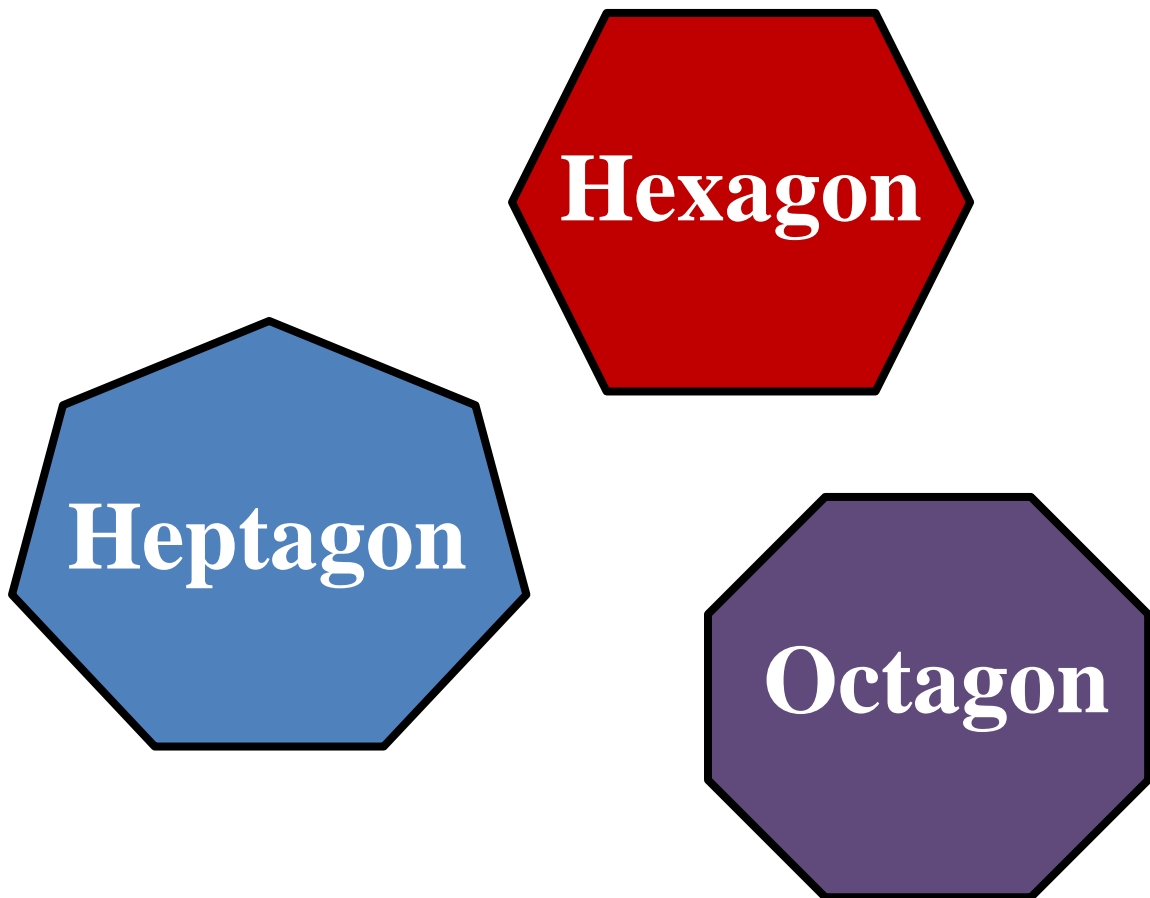
Polygons:

Triangle, Quadrilateral,
and Pentagon



Polygons:

Hexagon, Heptagon, and Octagon



Polygons:

Nonagon and Decagon



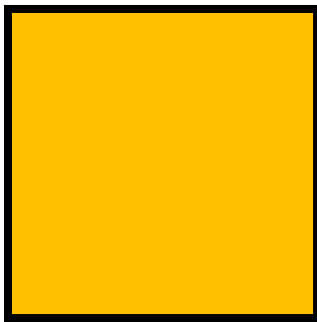
Quadrilaterals



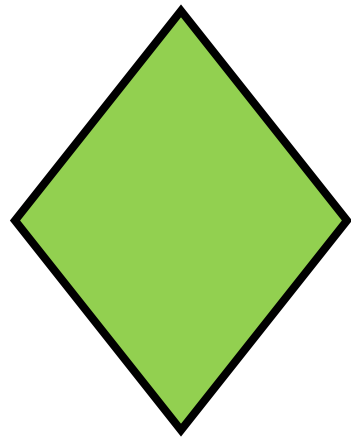
parallelogram



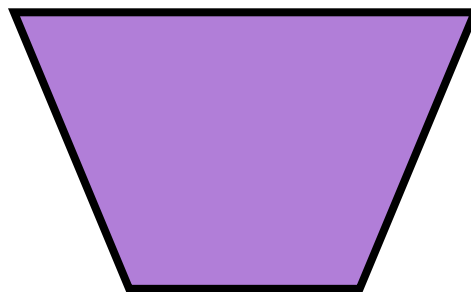
rectangle



square

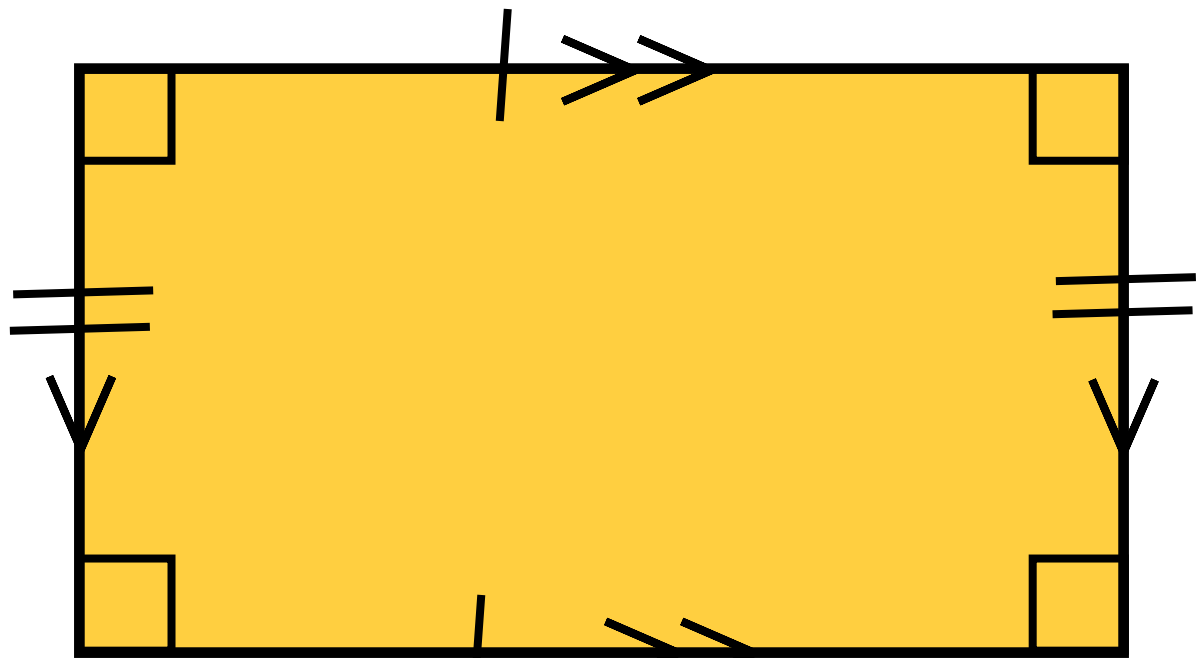


rhombus



trapezoid

Geometric Markings

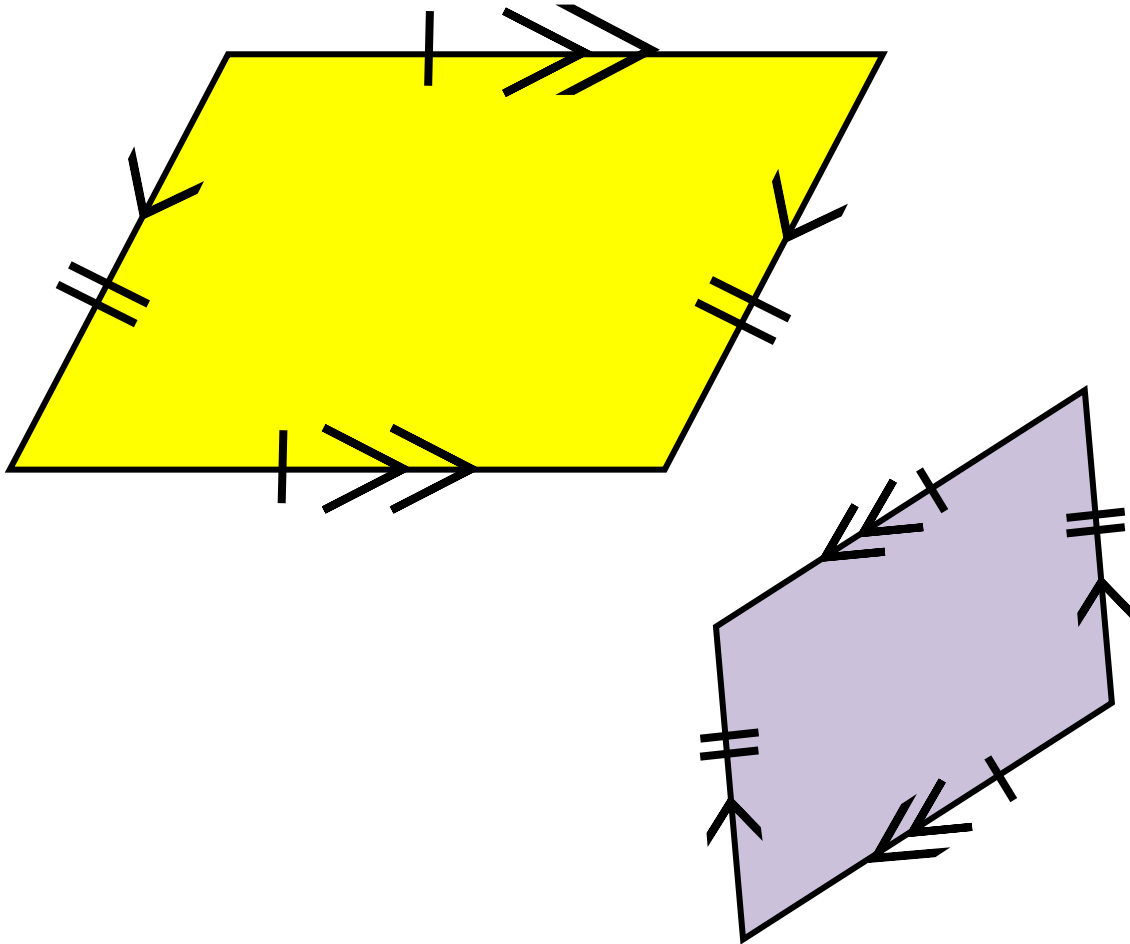


Right angle

Congruent sides

Parallel sides

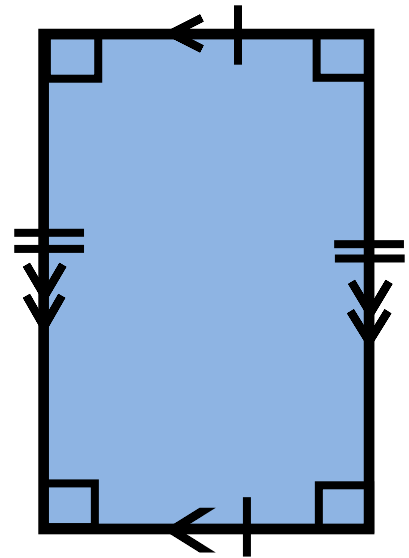
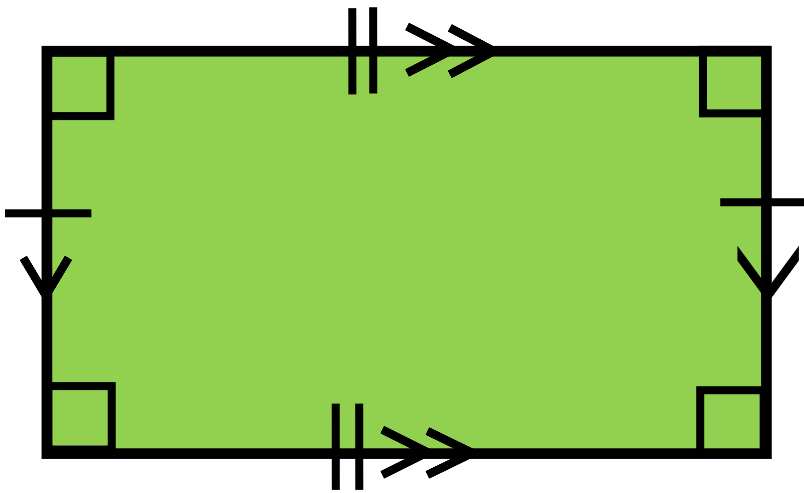
Parallelogram



- opposite sides are parallel and congruent

Rectangle:

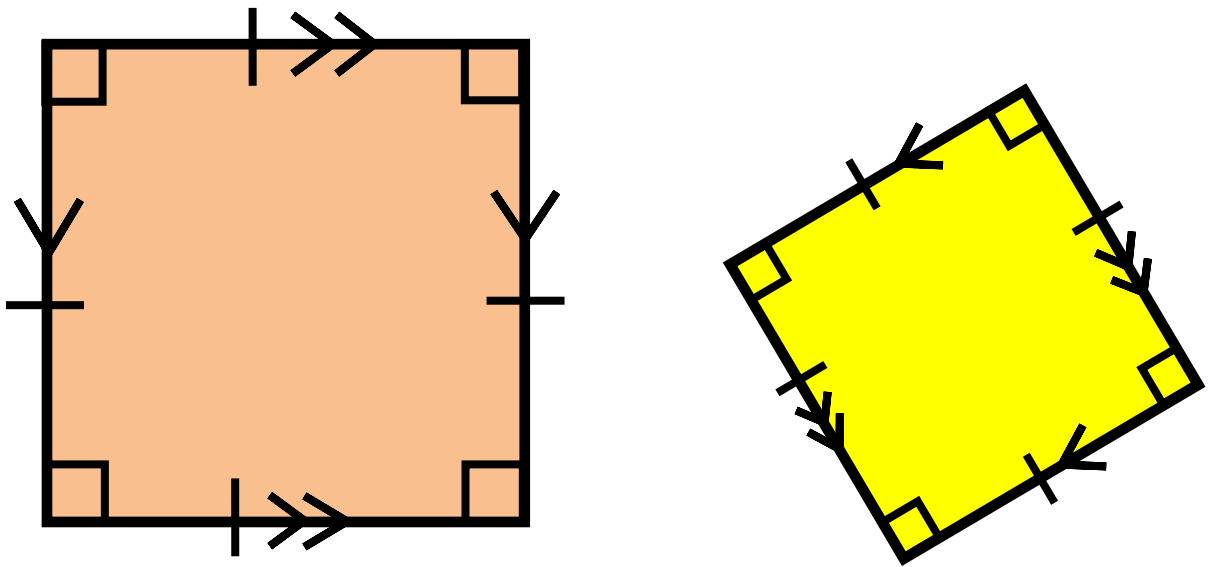
Right Angle



- 4 right angles
- opposite sides are parallel and congruent

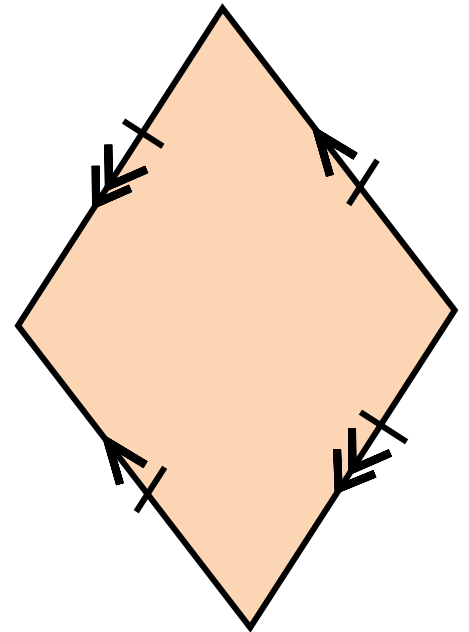
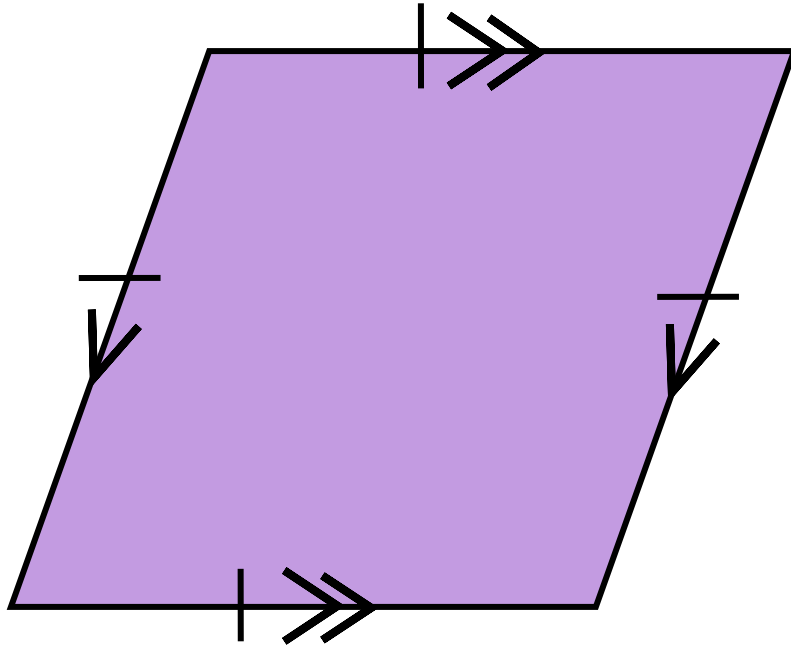
Square:

Right Angle



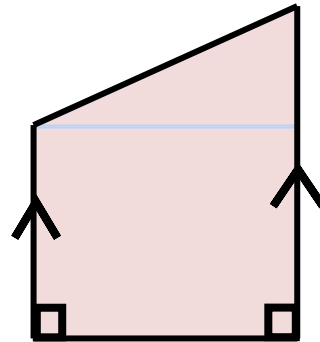
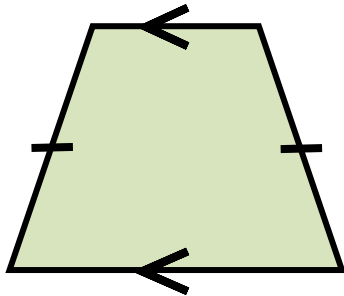
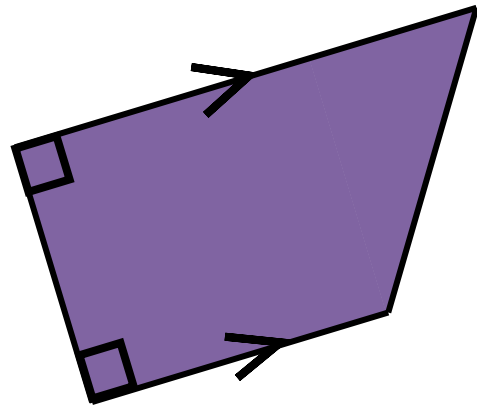
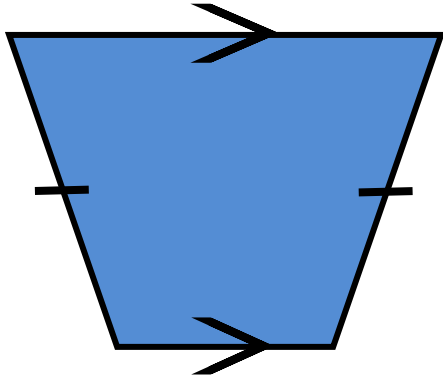
- 4 right angles
- 4 congruent sides
- 2 pairs of parallel sides

Rhombus



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

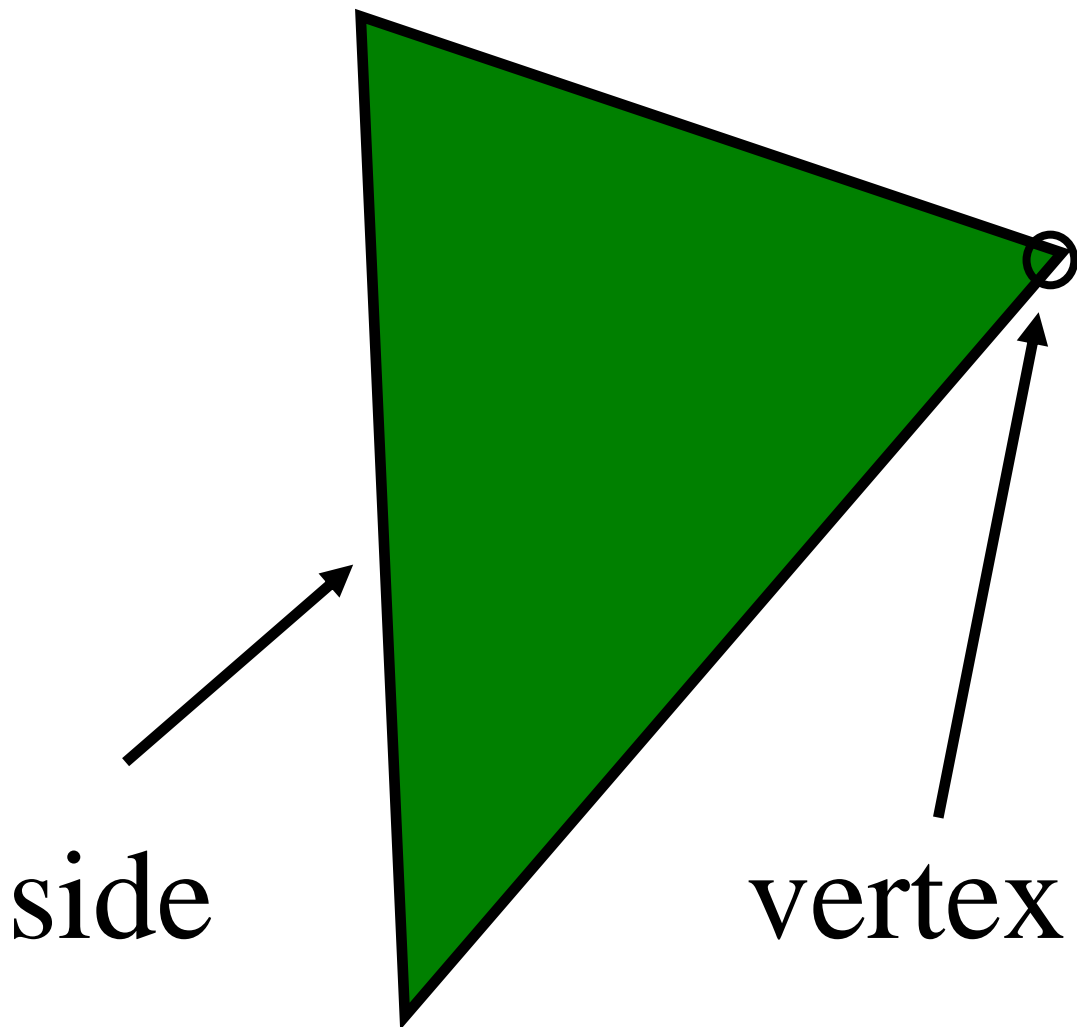
Trapezoid



- exactly one pair of parallel sides

Triangle:

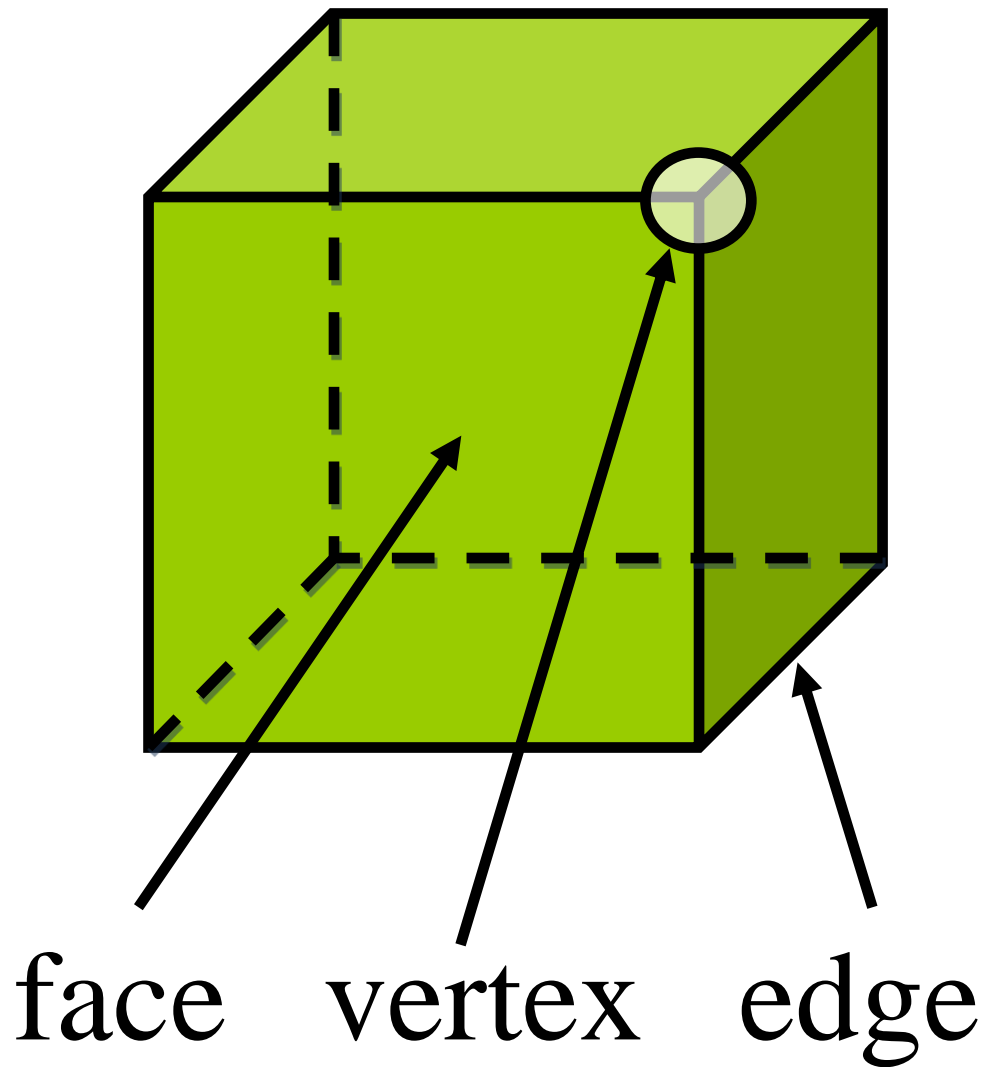
Side and Vertex



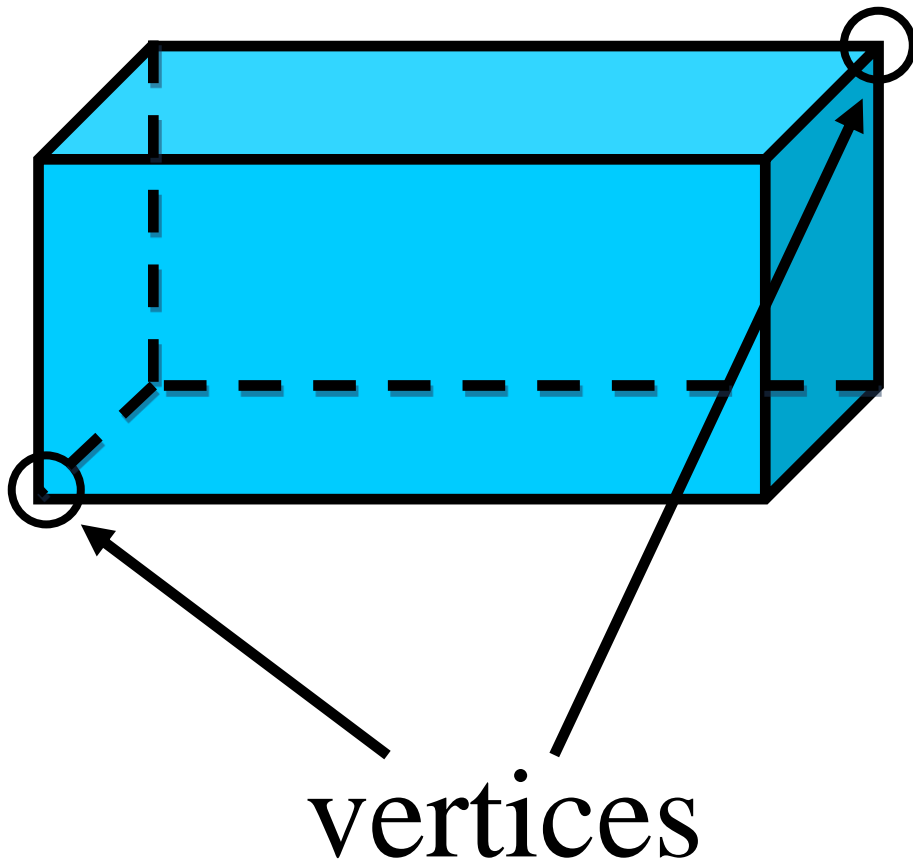
Sphere



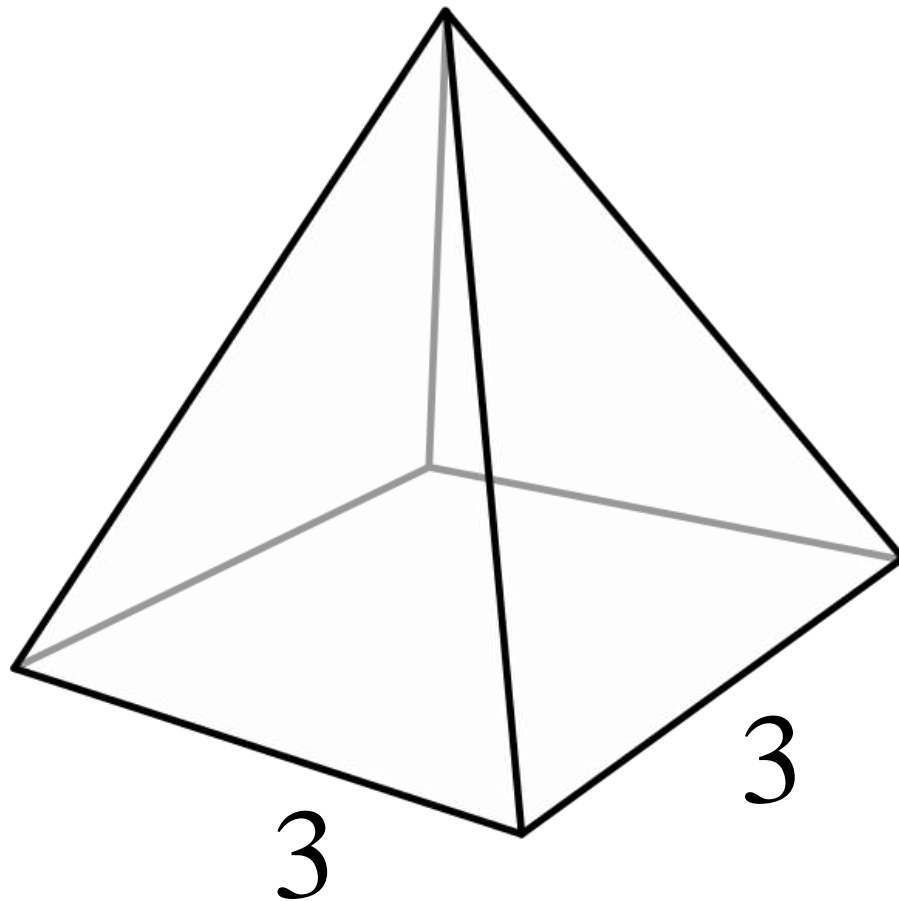
Cube



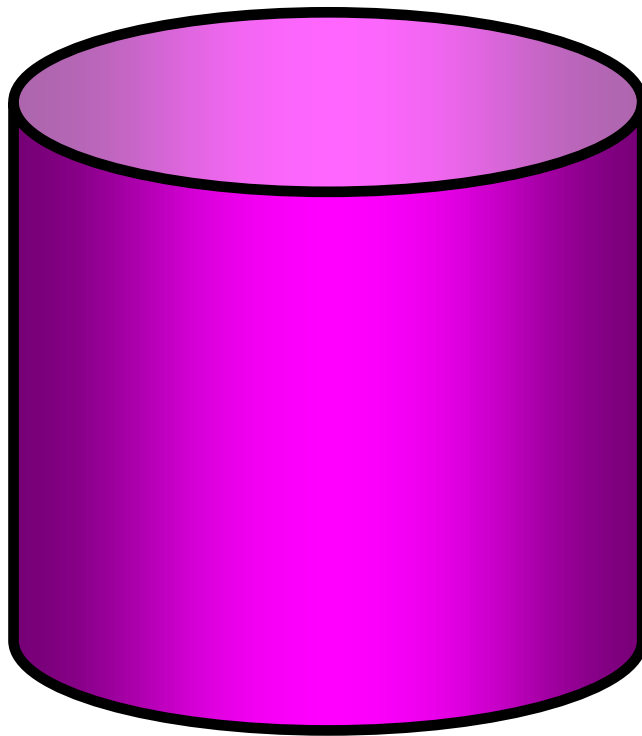
Rectangular Prism: Vertices



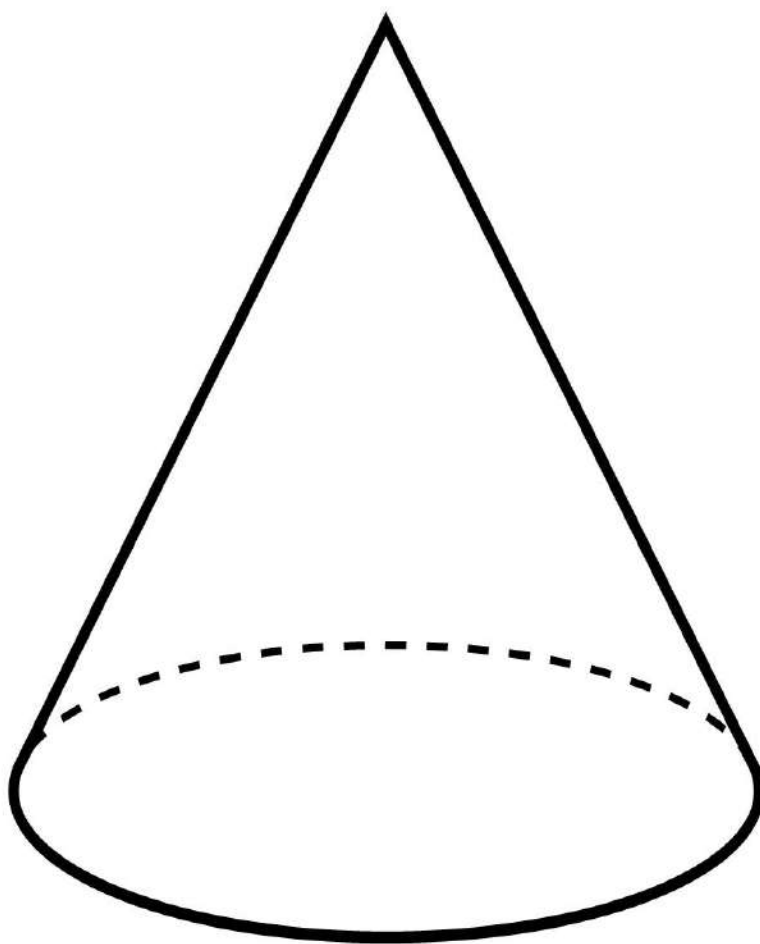
Square Pyramid



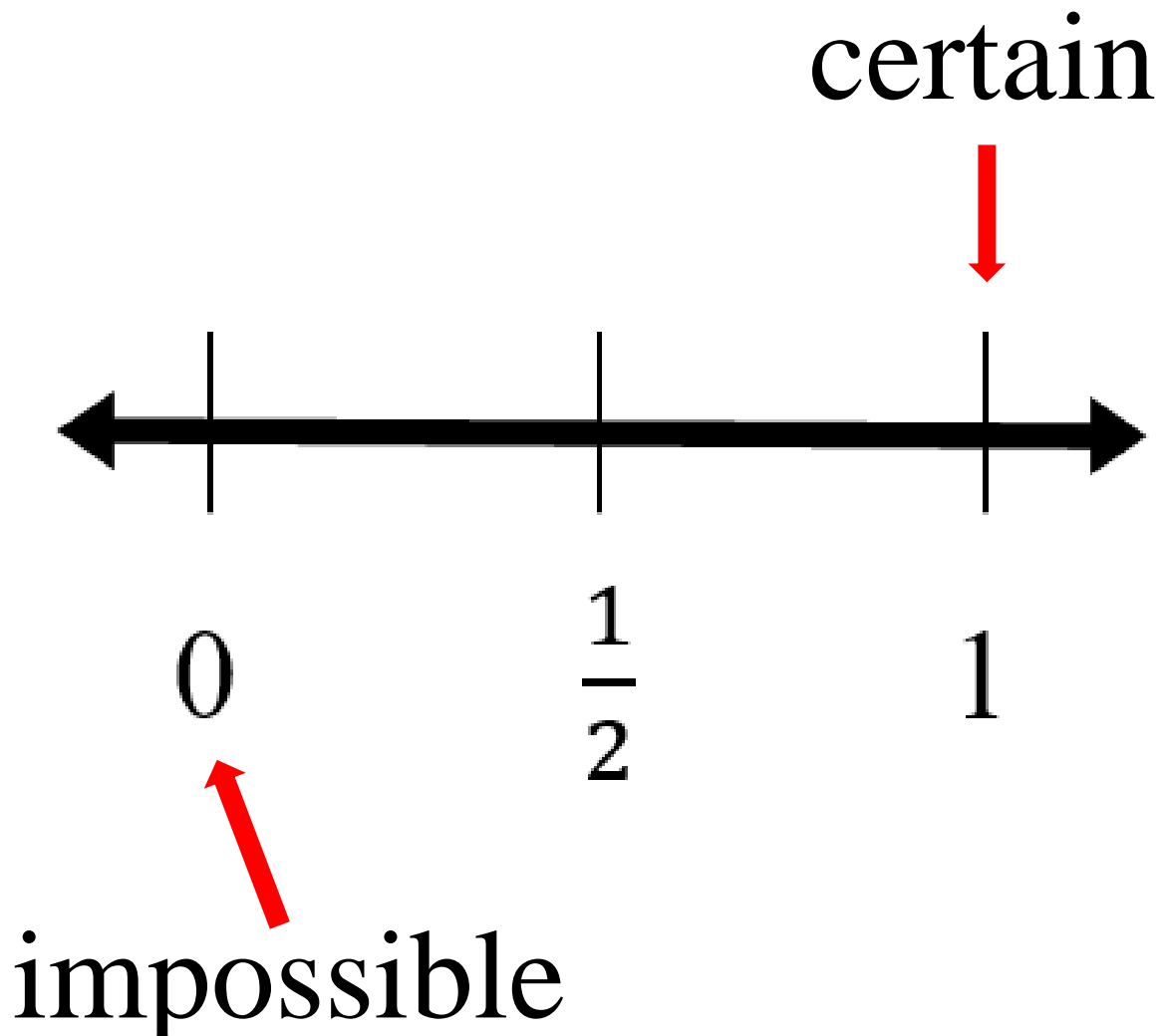
Cylinder



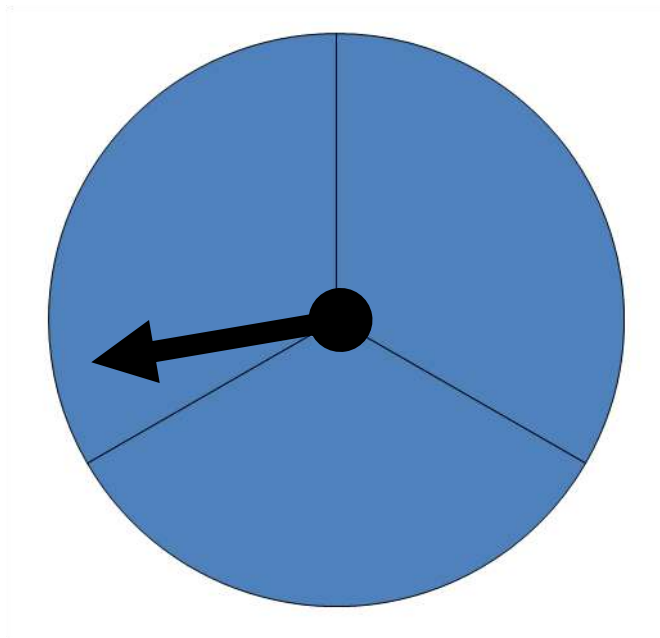
Cone



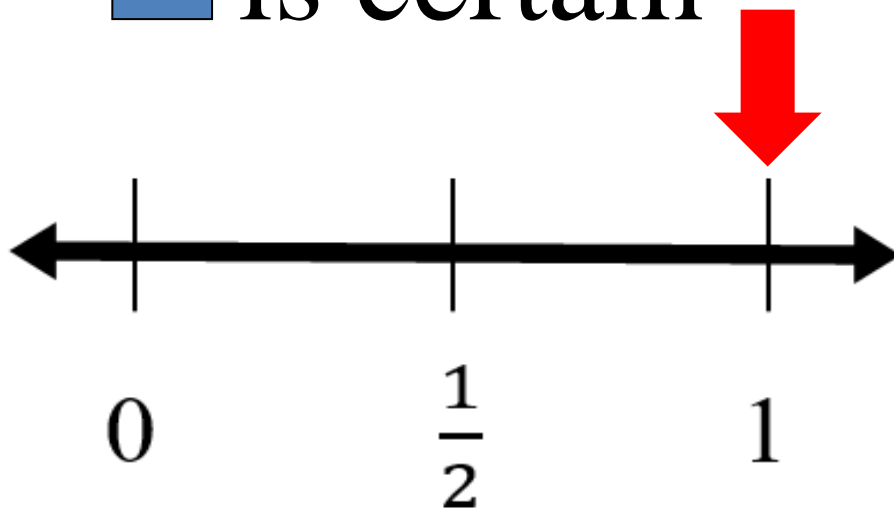
Probability Number Line



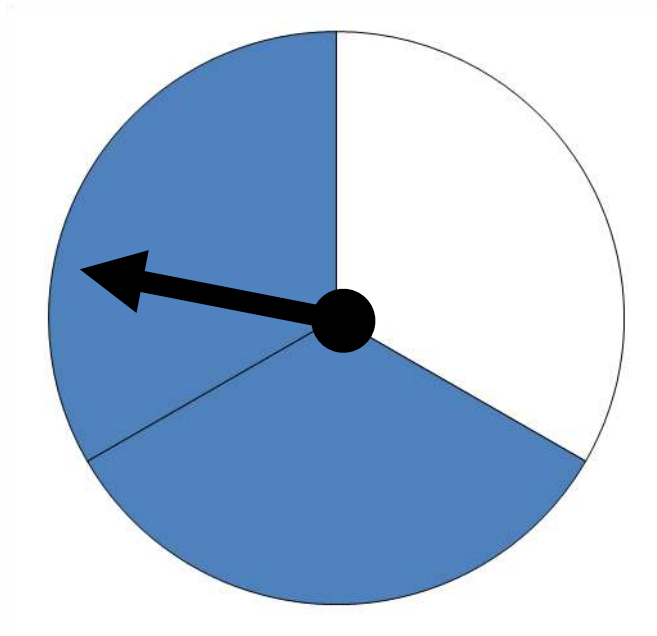
Certain



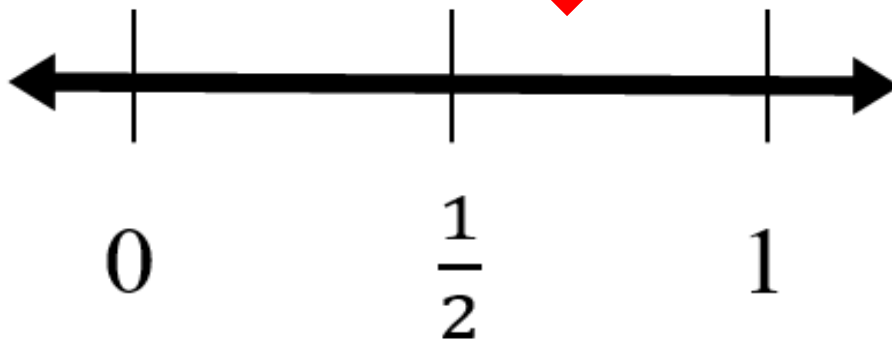
 is certain



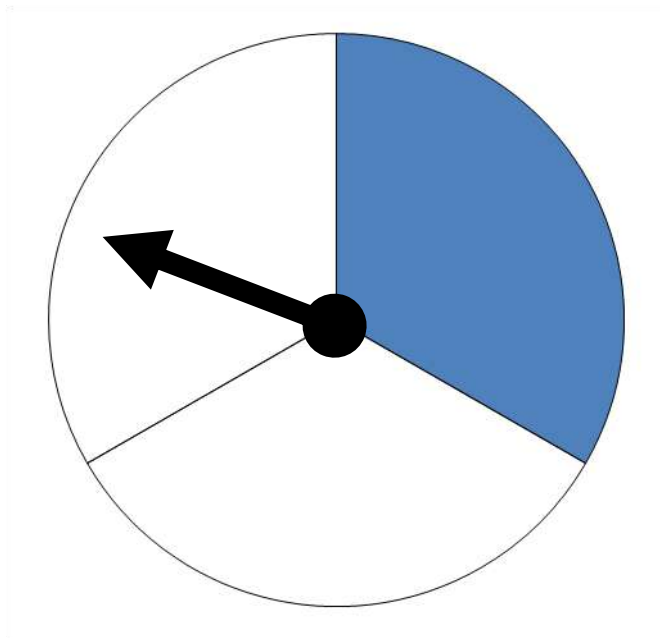
Likely



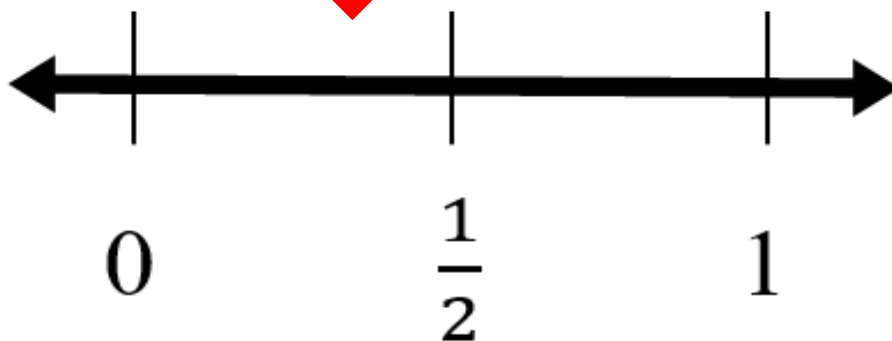
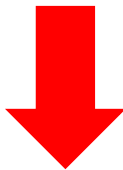
 is likely



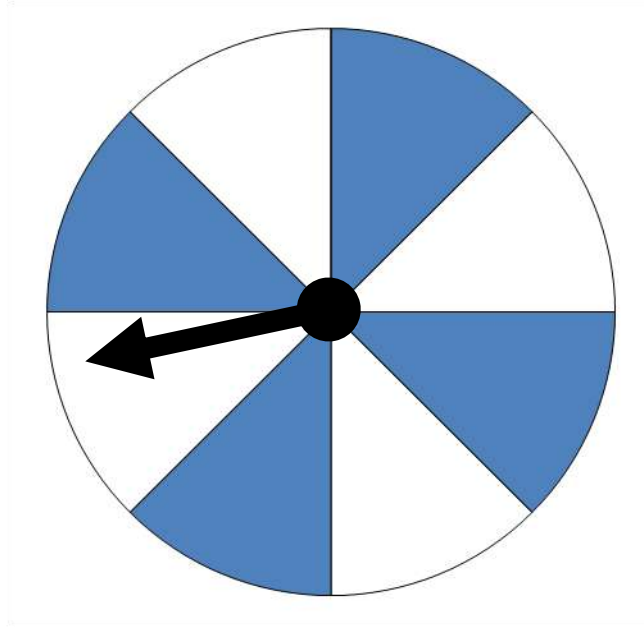
Unlikely



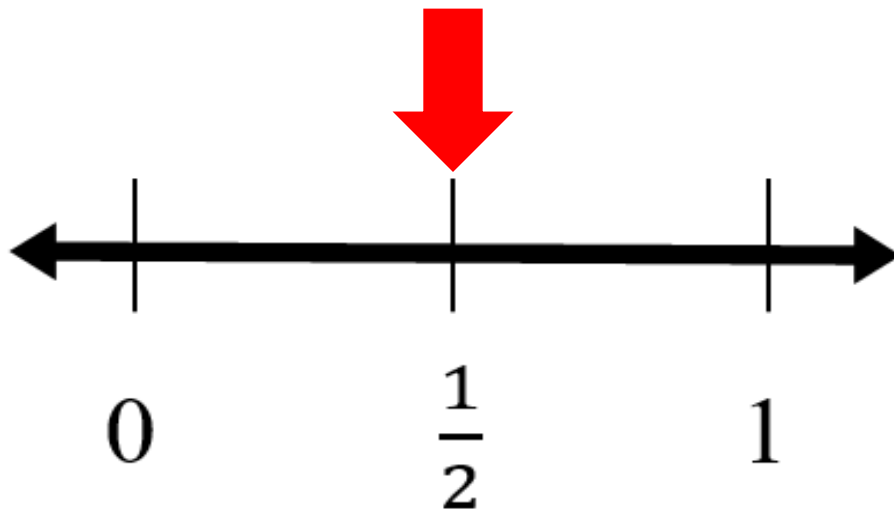
 is unlikely



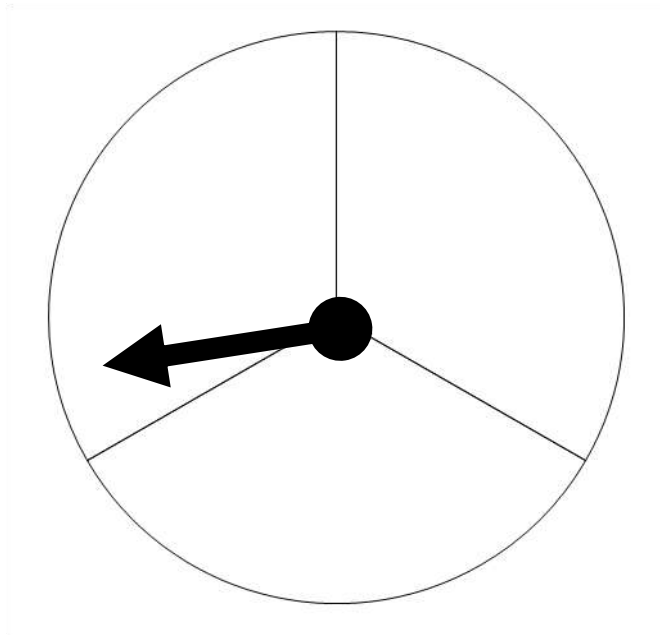
Equally likely



■ and □ are equally likely



Impossible

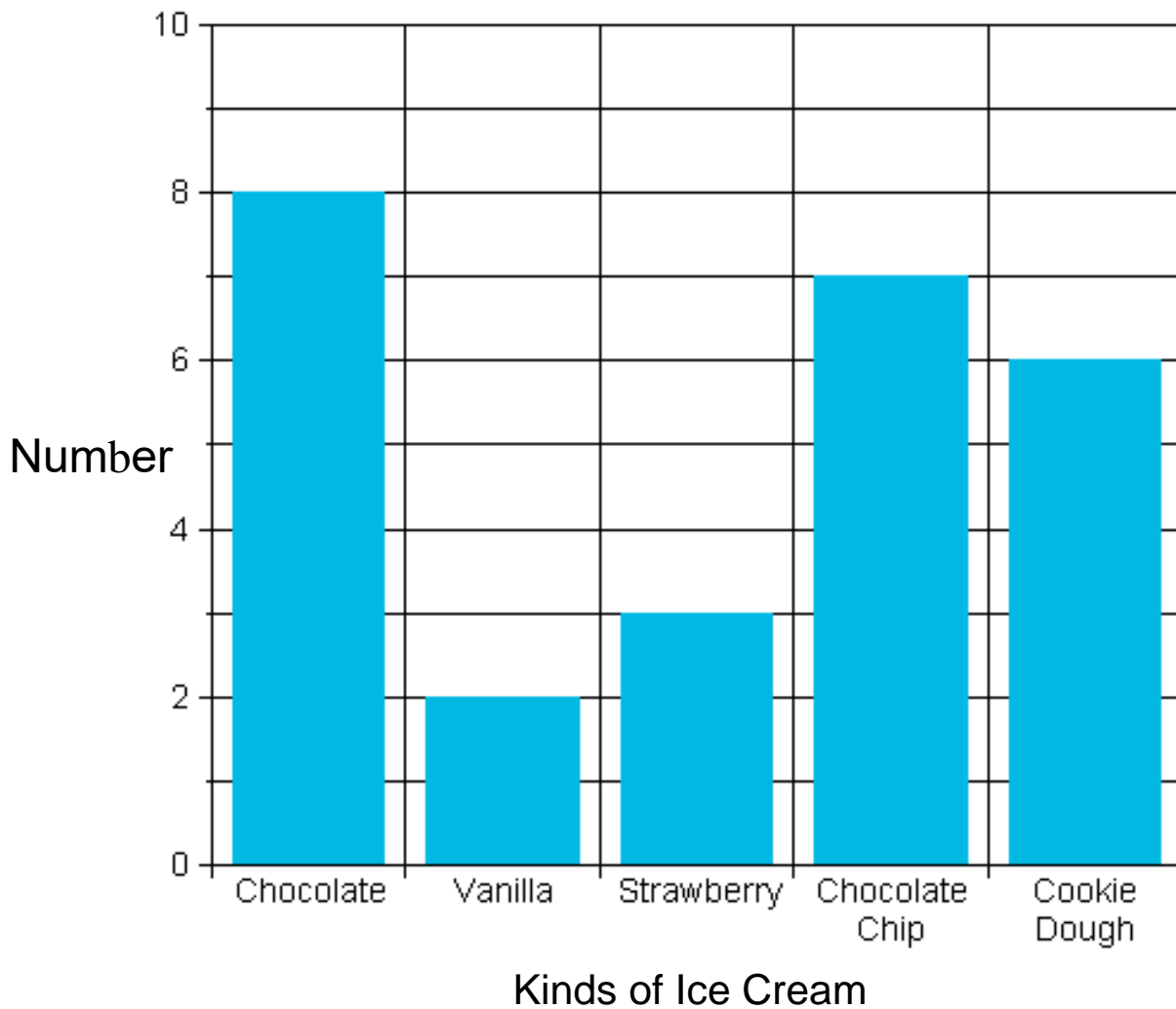


 is impossible

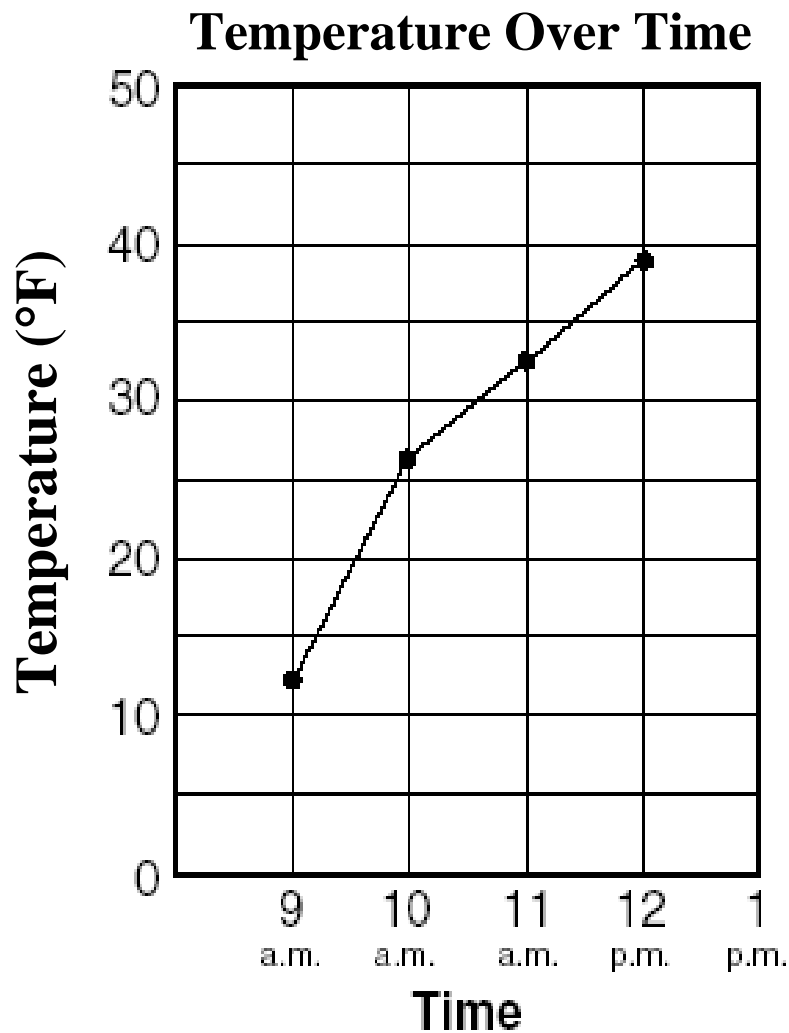


Bar Graph

Our Favorite Ice Cream



Line Graph



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

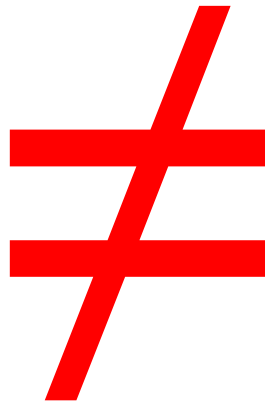


$$10 + 8 = 36 \div 2$$

$$8 \times 4 = 190 - 158$$

$$16 \times 3 = 8 \times 6$$

Inequality



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

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

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

Expression

a representation of a
quantity

5

$4 + 3$

$8 - 2$

2×7