

Middle School Mathematics

Vocabulary Word Wall Cards

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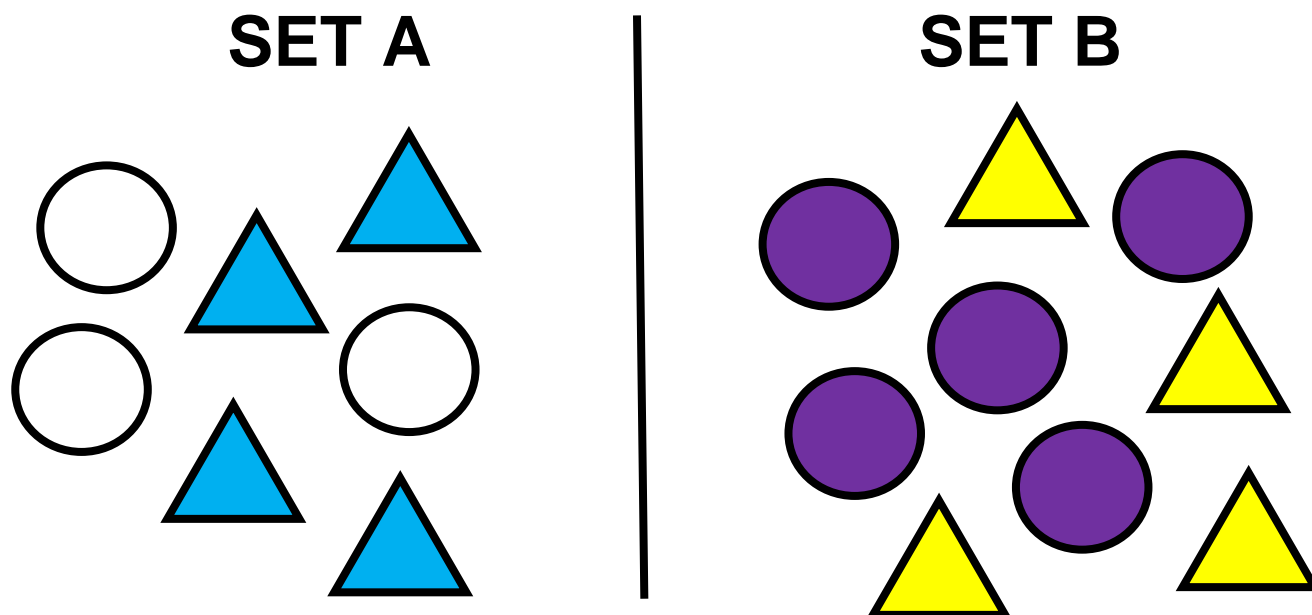
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Ratio

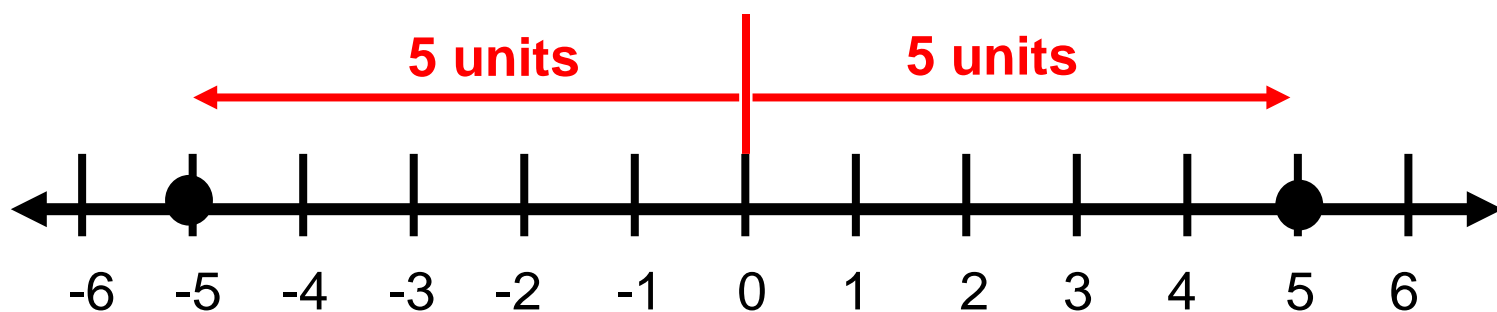
a comparison of any two quantities



 to 	4 to 3
 to all of set A	$\frac{4}{7}$
 to 	3:5
set B to set A	9 to 7 or 9:7

Absolute Value

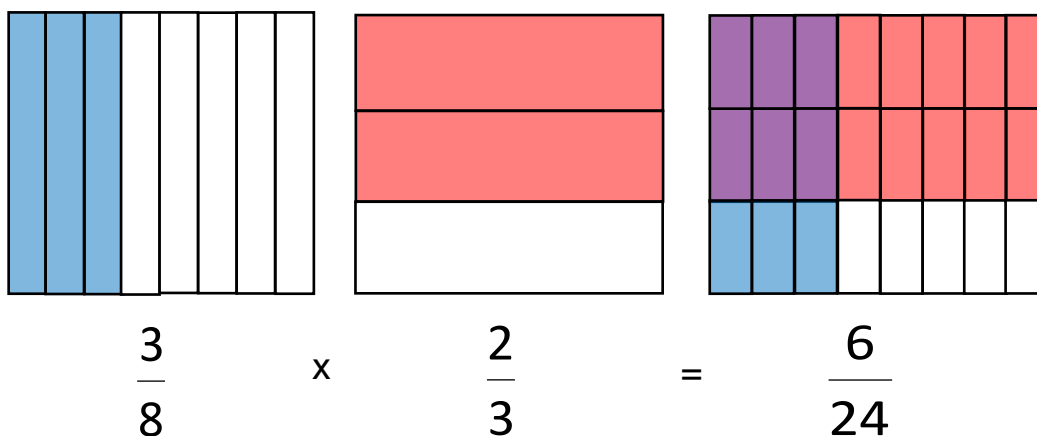
$$|5| = 5 \quad |-5| = 5$$



distance a number is from zero

Fraction Multiplication

How much is $\frac{3}{8}$ of $\frac{2}{3}$?

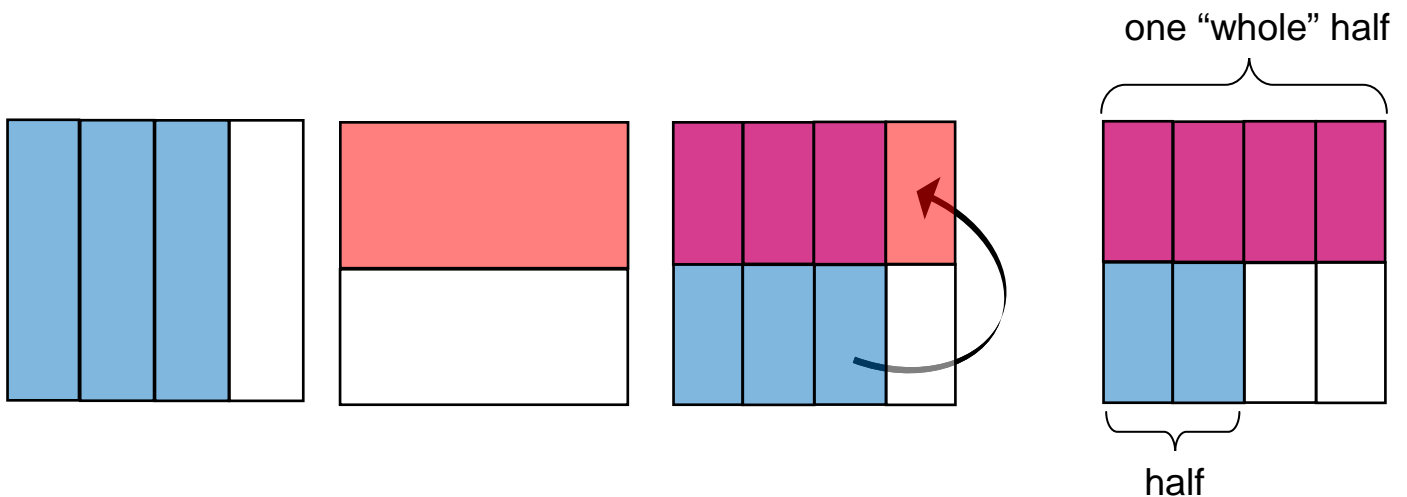


$$\frac{3}{8} \times \frac{2}{3} = \frac{6}{24} = \frac{1}{4}$$

Fraction Division

$$\frac{3}{4} \div \frac{1}{2}$$

How many halves are in three-fourths?



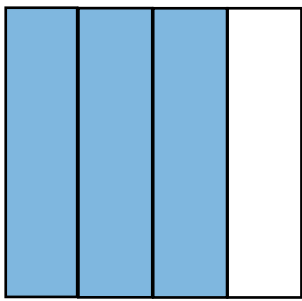
There are $1\frac{1}{2}$ halves in three-fourths.

$$\frac{3}{4} \div \frac{1}{2} = 1\frac{1}{2}$$

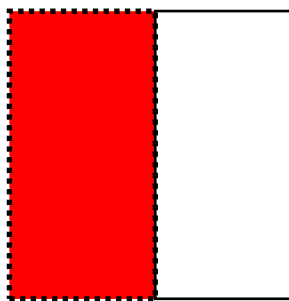
Fraction Division

$$\frac{3}{4} \div \frac{1}{2}$$

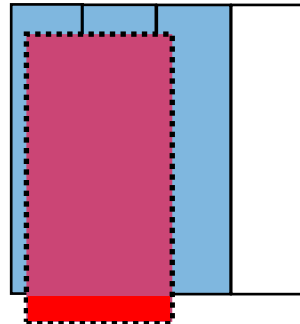
How many halves are in three-fourths?



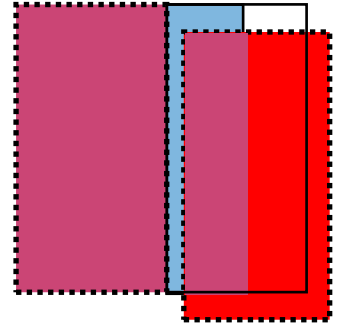
three-fourths



one-half



1 "whole" one-half



$\frac{1}{2}$ one-half

There are $1\frac{1}{2}$ halves in three-fourths.

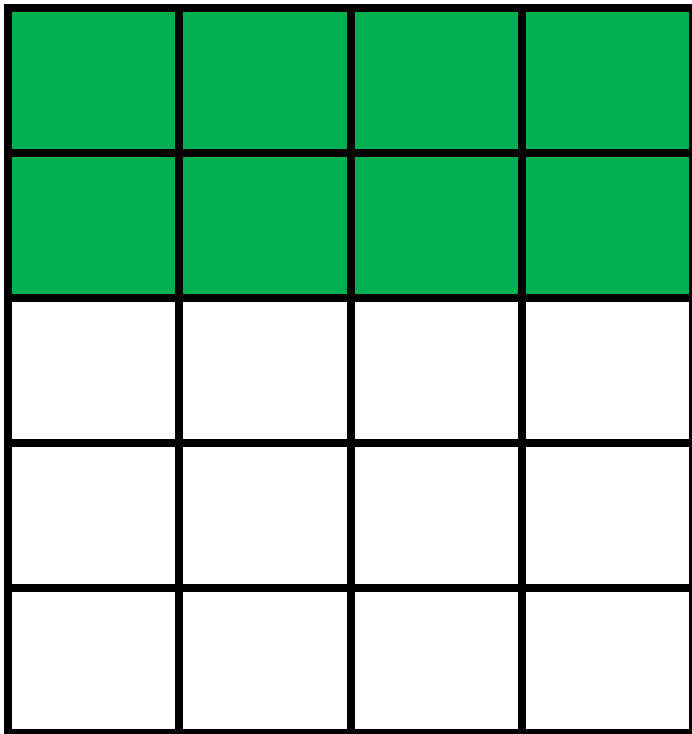
$$\frac{3}{4} \div \frac{1}{2} = 1\frac{1}{2}$$

Percent

Per hundred

$$56\% = \frac{56}{100} = \frac{14}{25} = 0.56$$

Equivalent Relationships



Fraction: $\frac{2}{5}$

Decimal: 0.4

Percent: 40%

Exponential Form

The diagram illustrates the components of exponential form using two examples. The first example is $2^3 = 2 \cdot 2 \cdot 2$. A red arrow points from the word "base" to the number 2, and another red arrow points from the word "exponent" to the number 3. The second example is $n^4 = n \cdot n \cdot n \cdot n$. A red arrow points from the word "base" to the letter n, and another red arrow points from the word "exponent" to the number 4. A bracket underneath the four n's in the expanded form is labeled "factors".

base

exponent

$$2^3 = 2 \cdot 2 \cdot 2$$
$$n^4 = n \cdot n \cdot n \cdot n$$

factors

Perfect Squares

$$0^2 = 0 \cdot 0 = \mathbf{0}$$

$$1^2 = 1 \cdot 1 = \mathbf{1}$$

$$2^2 = 2 \cdot 2 = \mathbf{4}$$

$$3^2 = 3 \cdot 3 = \mathbf{9}$$

$$4^2 = 4 \cdot 4 = \mathbf{16}$$

$$5^2 = 5 \cdot 5 = \mathbf{25}$$

$$\sqrt{16} = \sqrt{4 \cdot 4} = 4$$

 perfect square

Powers of Ten

	Meaning	Value
10^4	$10 \cdot 10 \cdot 10 \cdot 10$	10,000
10^3	$10 \cdot 10 \cdot 10$	1000
10^2	$10 \cdot 10$	100
10^1	10	10
10^0	1	1
10^{-1}	$\frac{1}{10}$	0.1
10^{-2}	$\frac{1}{10} \cdot \frac{1}{10}$	$\frac{1}{100} = 0.01$
10^{-3}	$\frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10}$	$\frac{1}{1000} = 0.001$
10^{-4}	$\frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10} \cdot \frac{1}{10}$	$\frac{1}{10,000} = 0.0001$

Scientific Notation

$$a \times 10^n$$

a = number greater than or
equal to 1 and less than 10

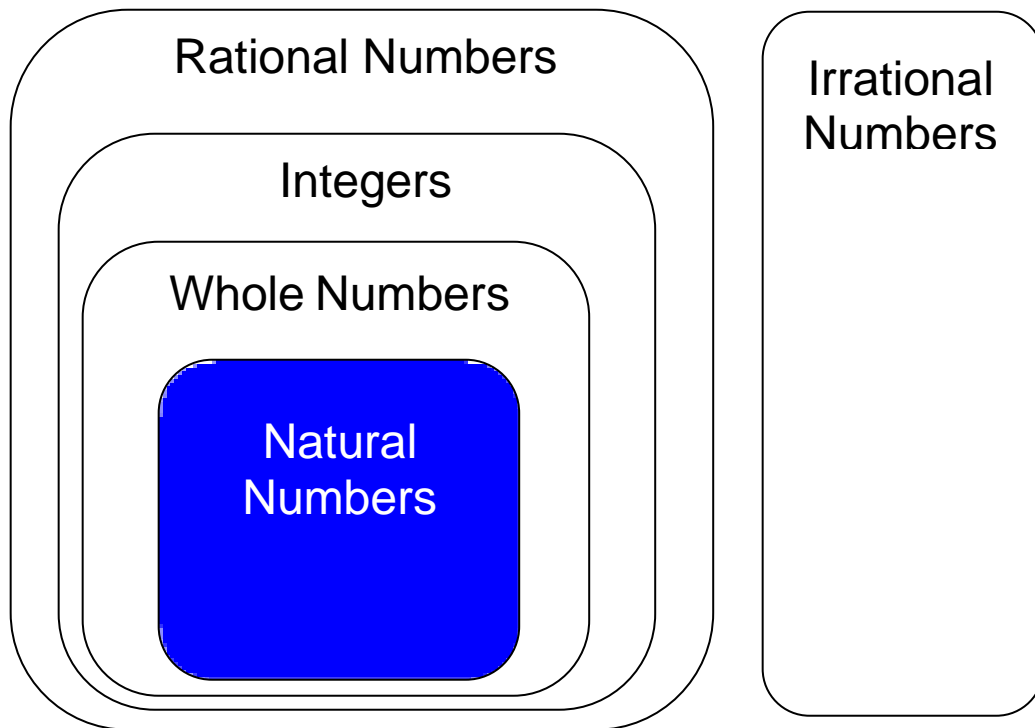
n = integer

$$17,500,000 = 1.75 \times 10^7$$

$$0.00000026 = 2.6 \times 10^{-6}$$

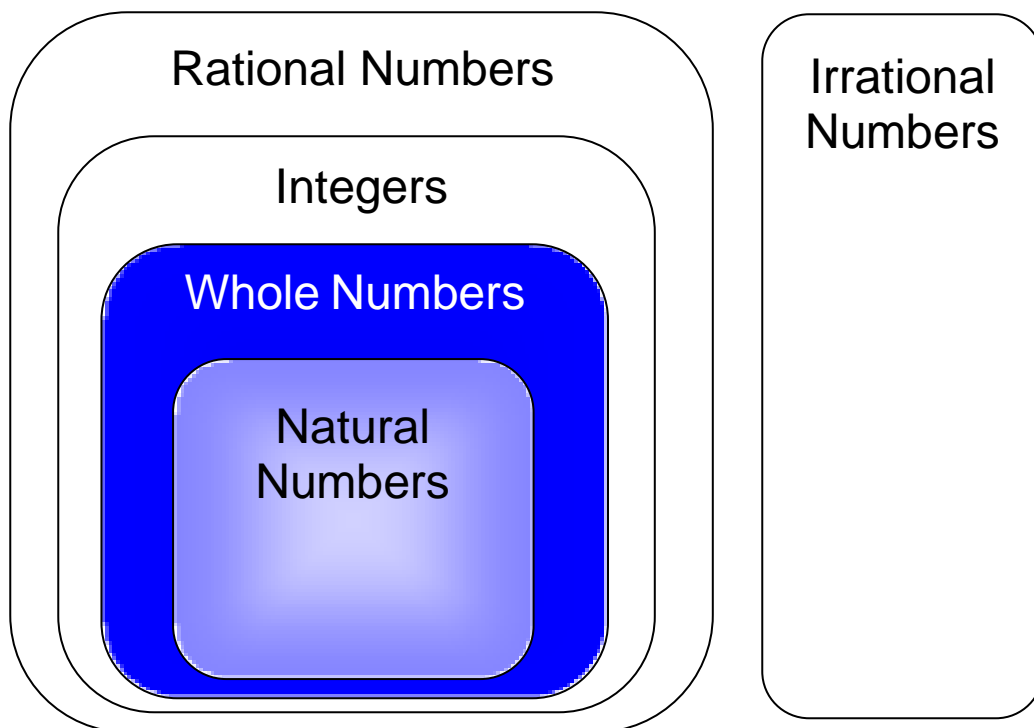
Natural Numbers

The set of numbers
 $1, 2, 3, 4, \dots$



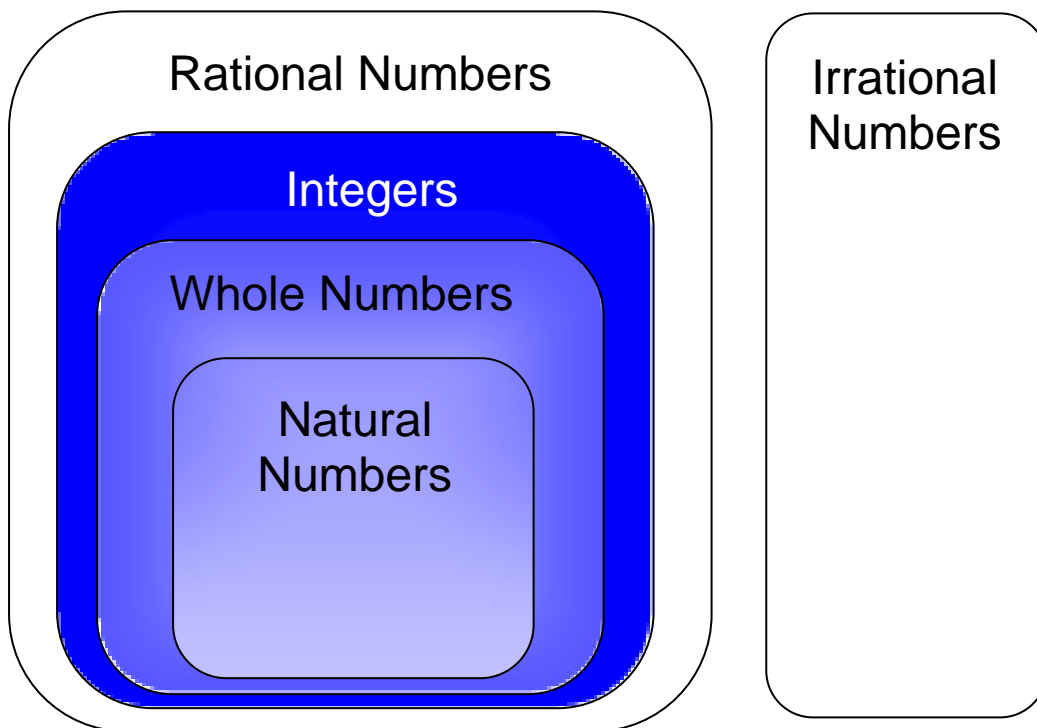
Whole Numbers

The set of numbers
 $0, 1, 2, 3, 4, \dots$

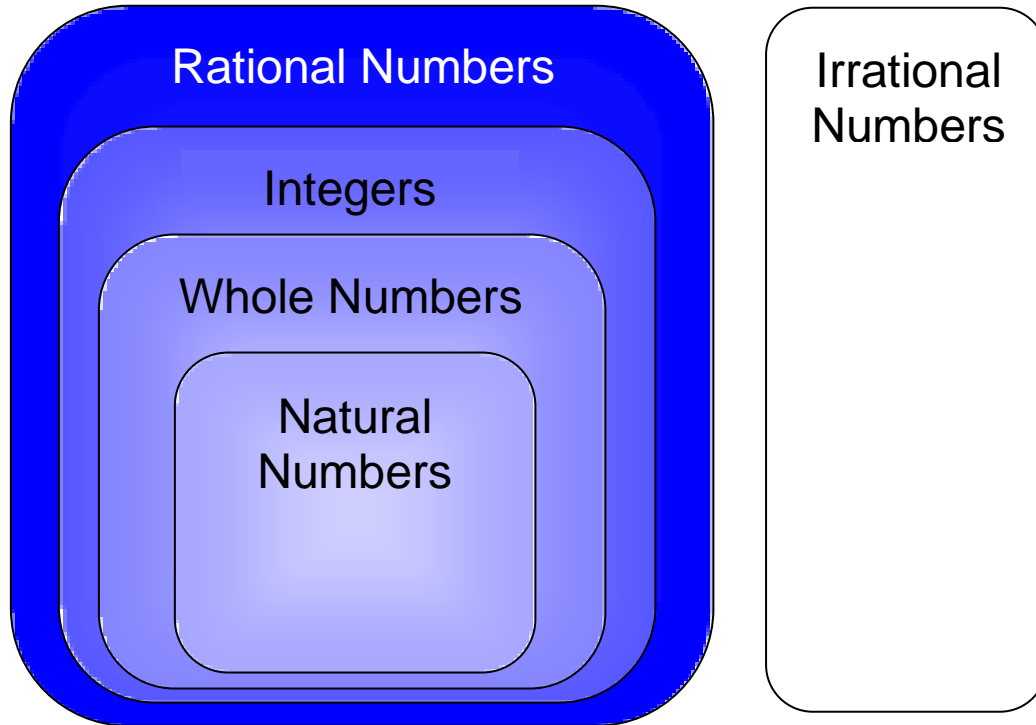


Integers

The set of numbers
...-3, -2, -1, 0, 1, 2, 3...



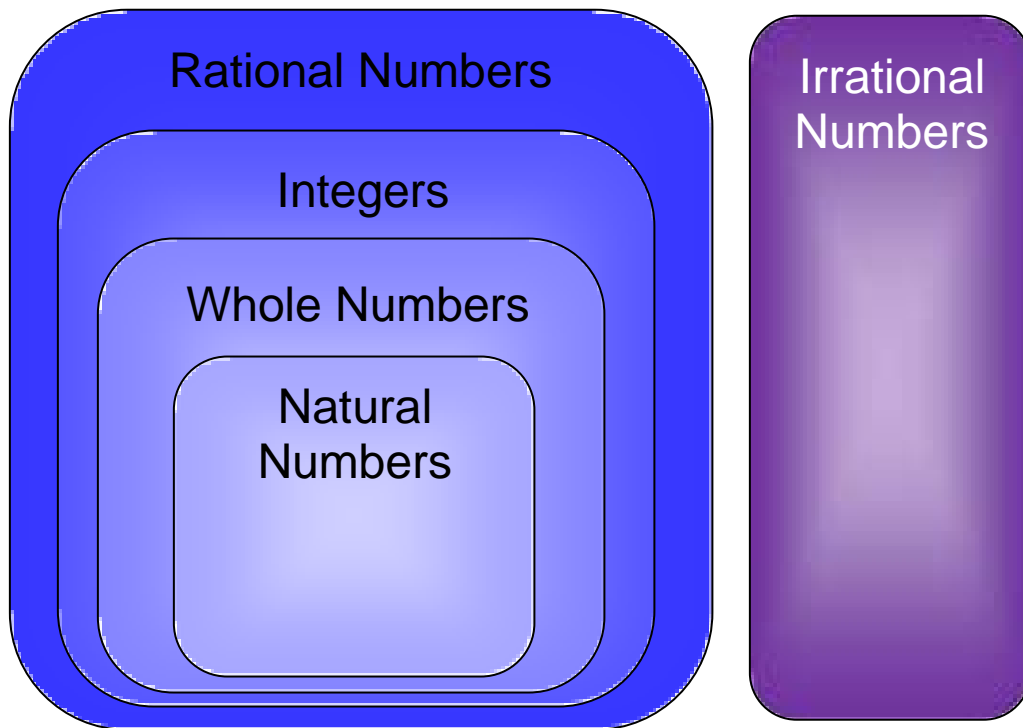
Rational Numbers



A number that can be written as the quotient of two integers

$$2\frac{3}{5} \quad -5 \quad 0.3 \quad \sqrt{16} \quad \frac{13}{7}$$

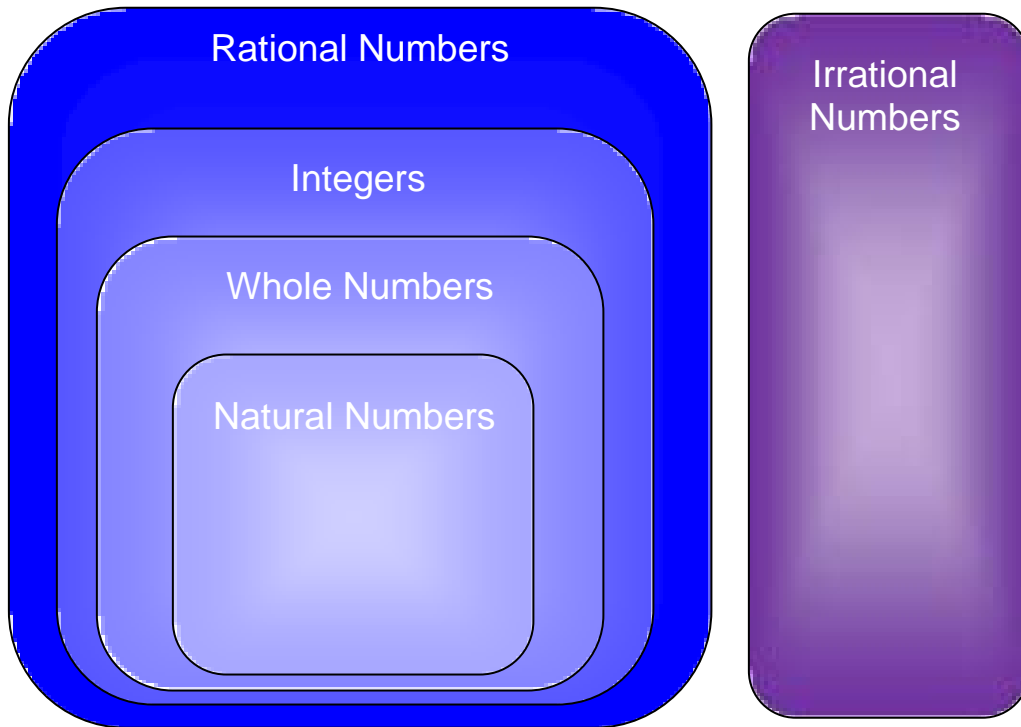
Irrational Numbers



A number that cannot be expressed as the quotient of two integers

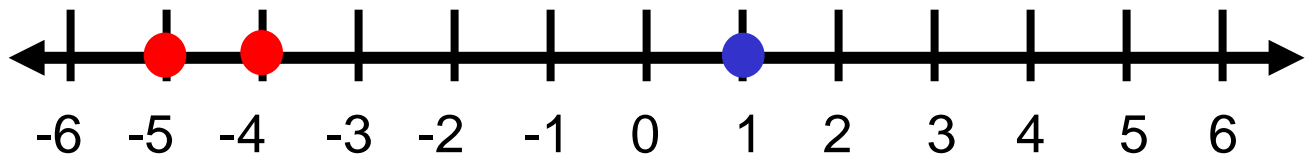
$\sqrt{7}$ π $-0.23223222322223\dots$

Real Numbers



The set of all rational and
irrational numbers

Comparing Integers



$$-5 < 1 \text{ or } 1 > -5$$

$$-4 > -5 \text{ or } -5 < -4$$

Order of Operations

Grouping Symbols { $()$
 $\{\}$
 $[\]$
 $|abs|$
Fraction bar

Exponents

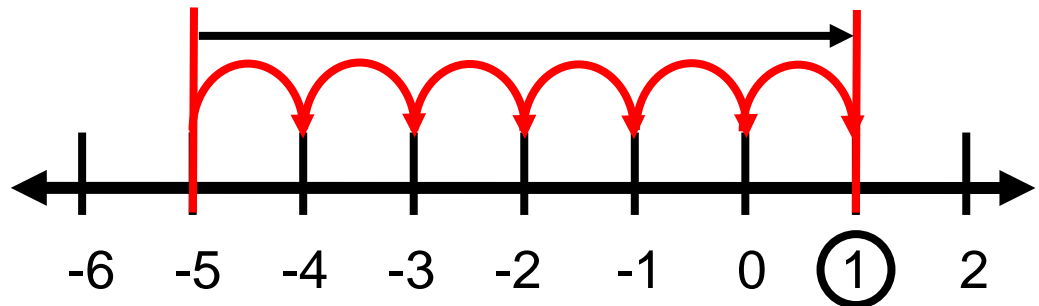
Multiplication { Left
to
right
Division

Addition { Left
to
right
Subtraction

Integer Operations

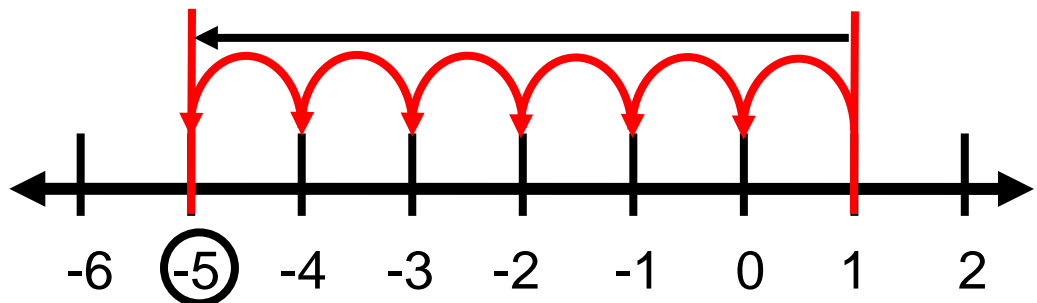
Addition

$$-5 + 6 = 1$$



Subtraction

$$1 - 6 = -5$$

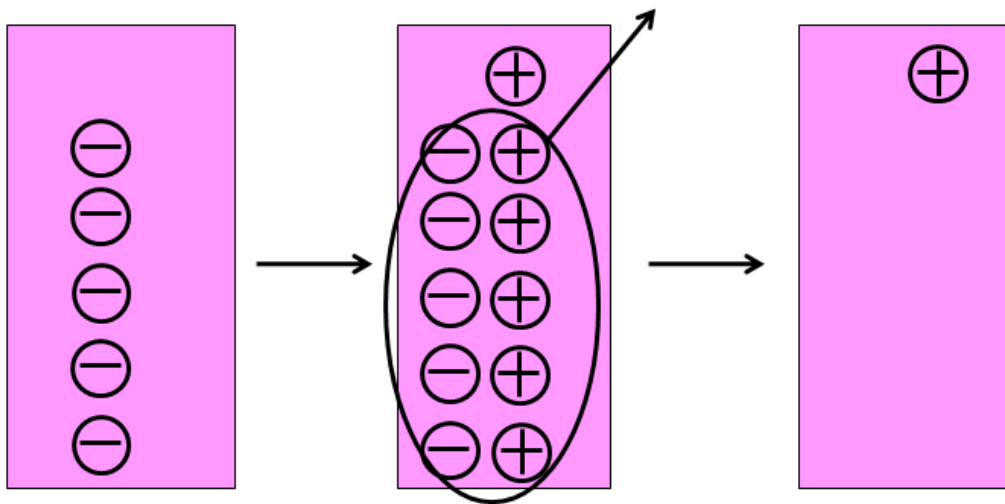


Integer Operations

Addition

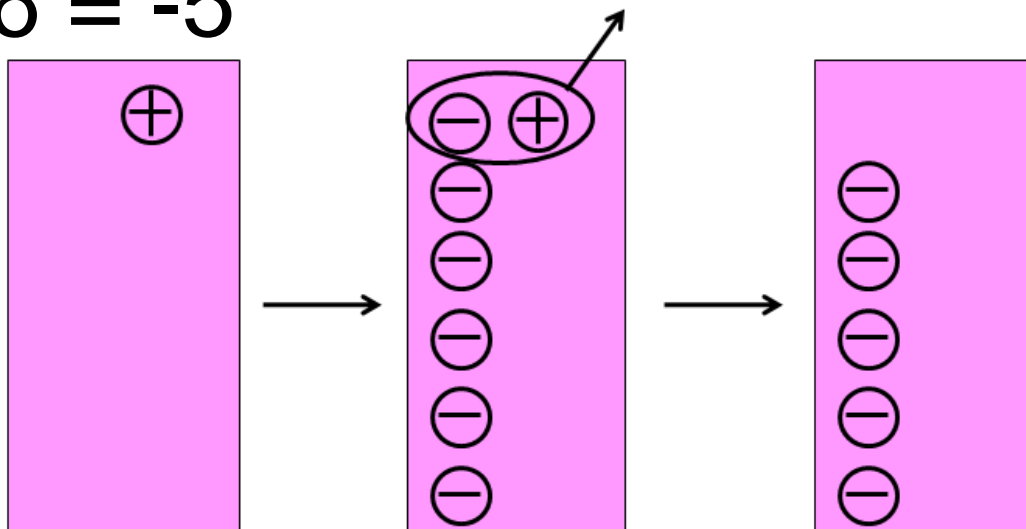
$$-5 + 6 = 1$$

$$\oplus = 1 \quad \ominus = -1$$



Subtraction

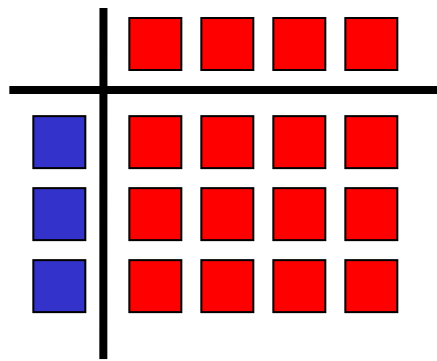
$$1 - 6 = -5$$



Integer Operations

Multiplication

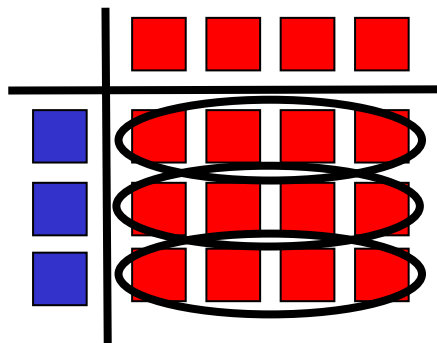
$$3 \cdot (-4) = -12$$



How many tiles are in 3 groups of -4 tiles?

Division

$$-12 \div -4 = 3$$



How many groups of -4 tiles are in -12 tiles?

Proportion

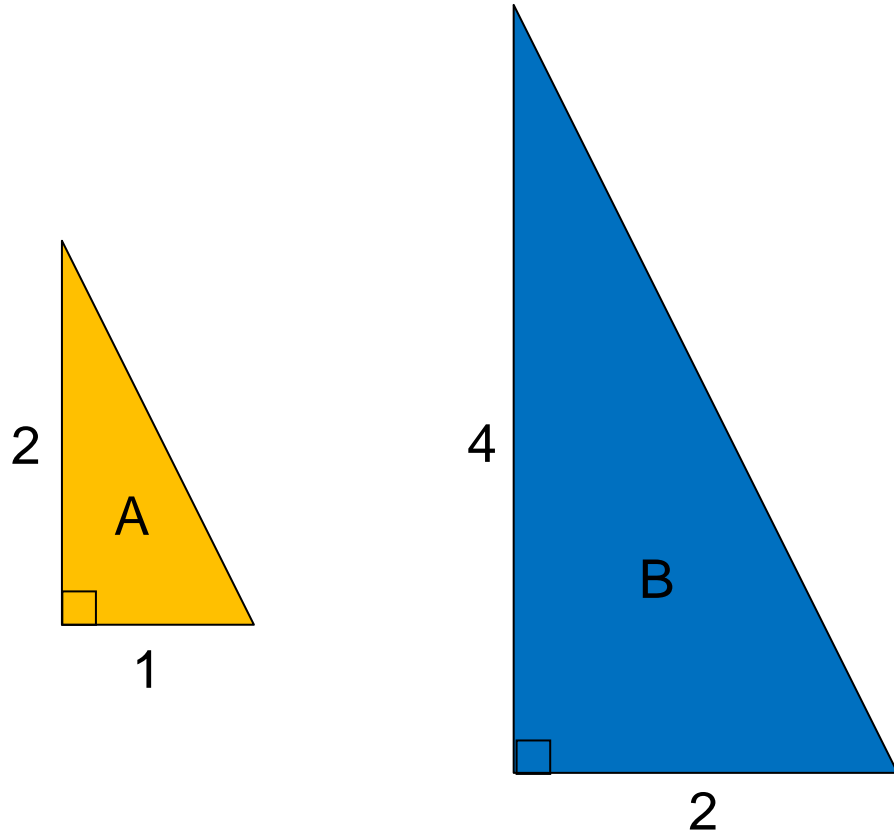
$$\frac{a}{b} = \frac{c}{d}$$

$$a:b = c:d$$

a is to b as c is to d

Scale Factor

Figures A and B are similar.



What is the scale factor from A to B?

Scale factor = 2

What is the scale factor from B to A?

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

Unit Rate

$$\text{\$4 per gallon} = \frac{\text{\$4}}{1 \text{ gallon}}$$

$$70 \text{ miles per hour} = \frac{70 \text{ miles}}{1 \text{ hour}}$$

Percent of Increase

$$\text{Percent of change} = \frac{\text{new} - \text{original}}{\text{original}}$$



Was \$3.25
per gallon

Now \$3.85
per gallon

What is the percent of
increase?

$$\frac{3.85 - 3.25}{3.25}$$

$$\frac{0.60}{3.25} = 0.18$$

increase of 18%

Percent of Decrease

$$\text{Percent of change} = \frac{\text{new} - \text{original}}{\text{original}}$$



Was \$1200
Now only \$900

What is the percent of decrease?


$$\frac{900 - 1200}{1200}$$

$$\frac{-300}{1200} = -0.25$$

decrease of 25%

Square Root

radical symbol


$$\sqrt{36} = 6$$

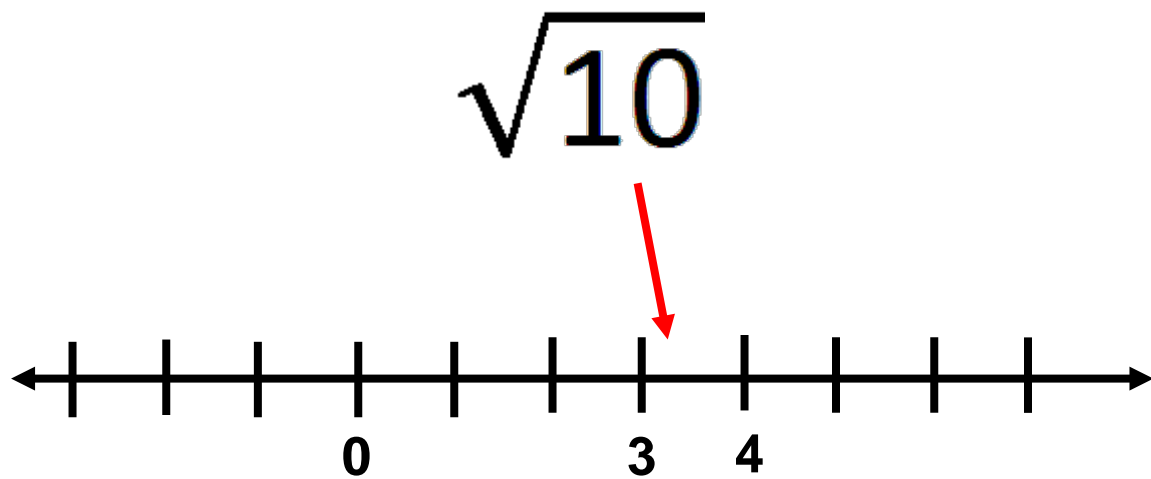
$$\sqrt{36} = \sqrt{6 \cdot 6} = \sqrt{6^2} = 6$$

Squaring a number and taking a square root are inverse operations.

$$-\sqrt{36} = -6$$

$$(-6)^2 = -6 \cdot -6 = 36$$

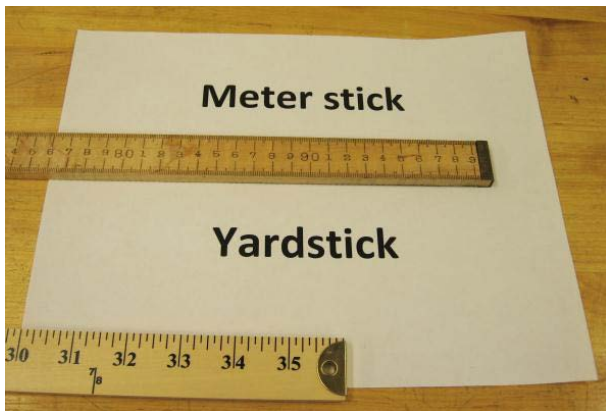
Square Root



between $\sqrt{9}$ and $\sqrt{16}$

Ballpark Comparisons Length

1 inch or
2.5 centimeter



$1 \text{ yard} < 1 \text{ meter}$

Ballpark Comparisons Weight/Mass



≈



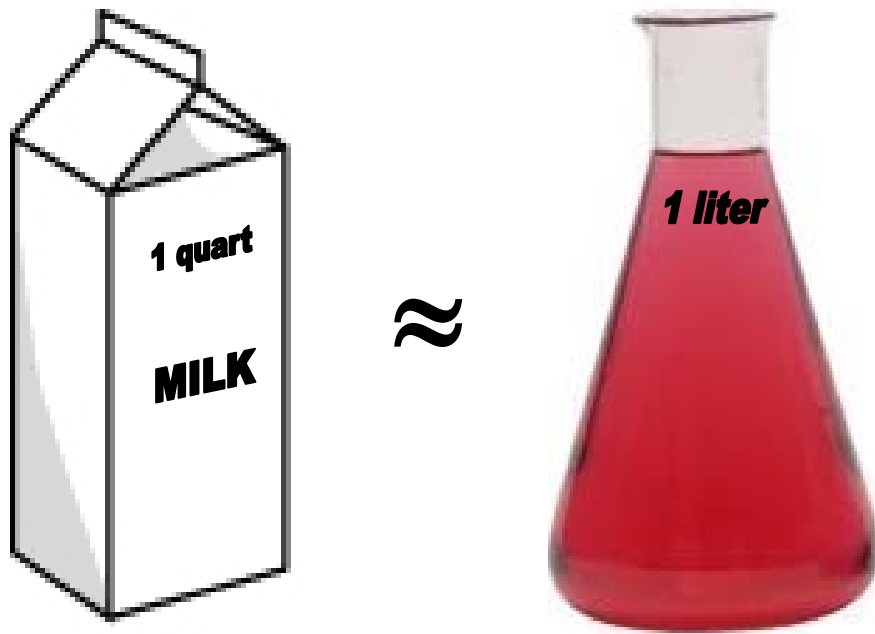
≈



≈



Ballpark Comparisons Volume

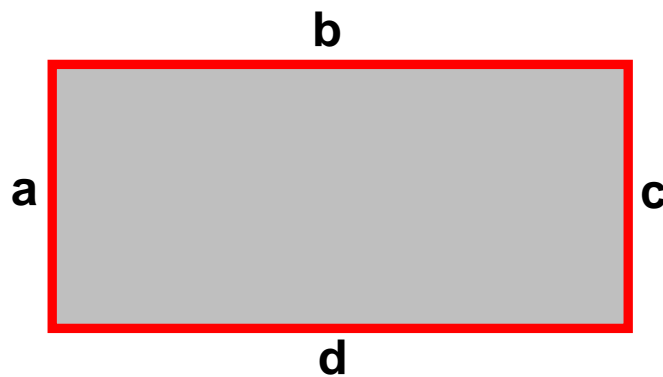


Ballpark Comparisons Temperature

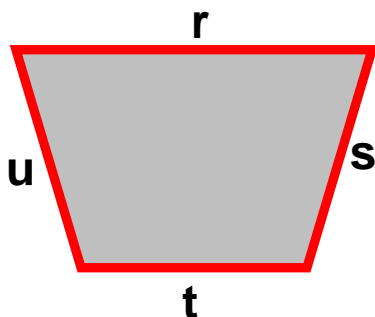
	Fahrenheit	Celsius
Water freezes	32°F	0°C
Water boils	212°F	100°C
Body Temperature	98°F	37°C
Room Temperature	70°F	20°C

Perimeter

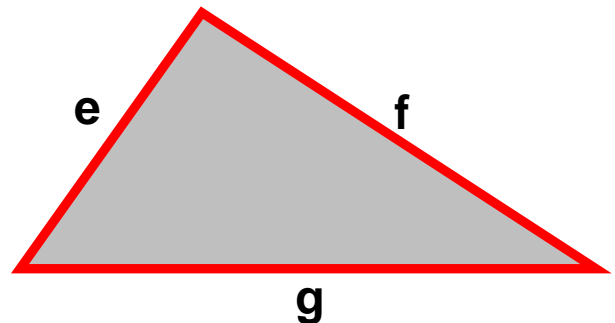
the measure of the distance
around a figure



$$P = a + b + c + d$$



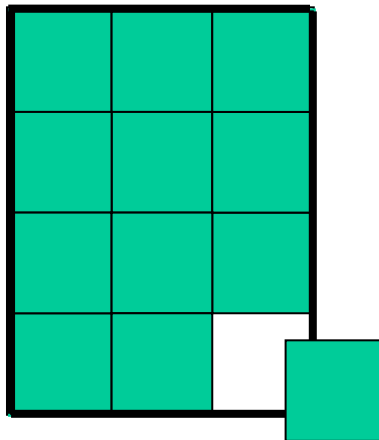
$$P = r + s + t + u$$



$$P = e + f + g$$

Area

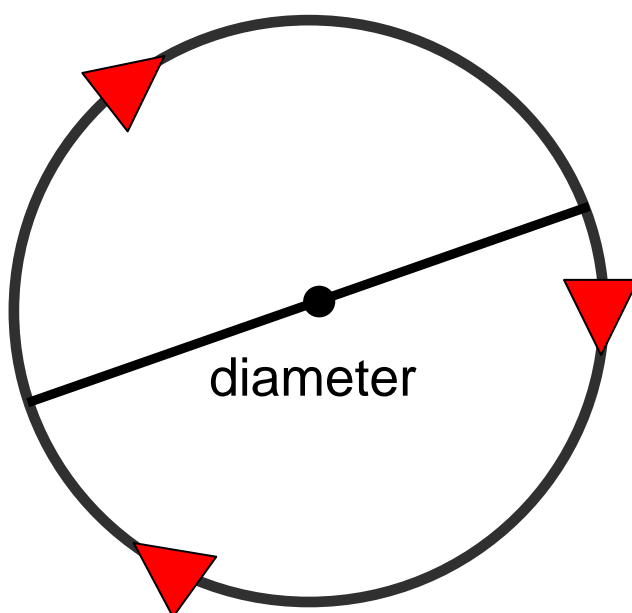
the number of square units
needed to cover a surface or
figure



Area = 12 Square Units

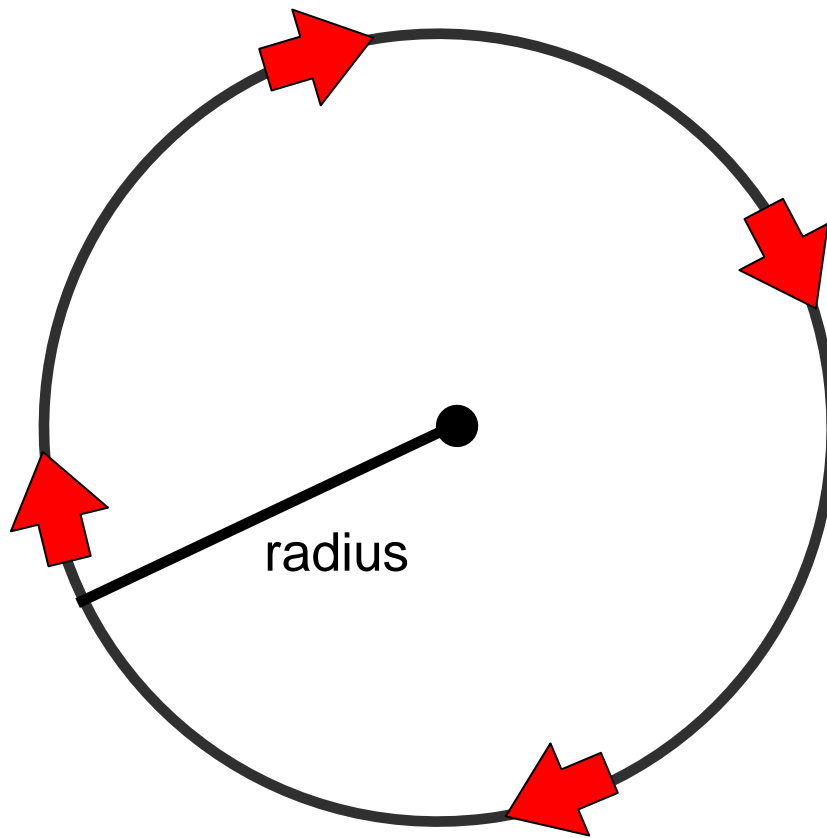
Pi

$$\pi \approx 3.14159\dots$$



$$\pi = \frac{\text{circumference}}{\text{diameter}}$$

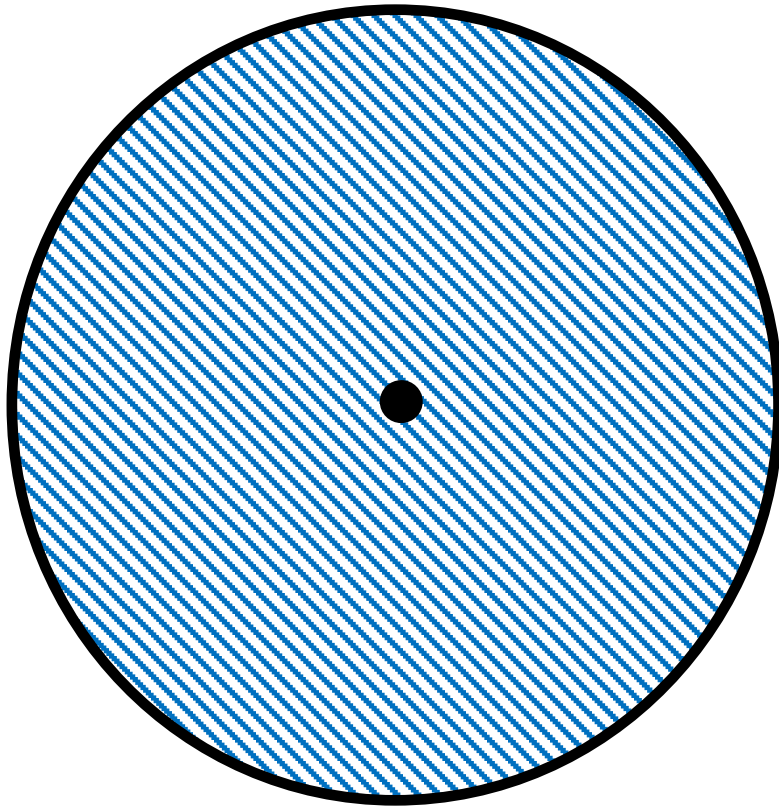
Circumference



$$C = 2\pi r$$

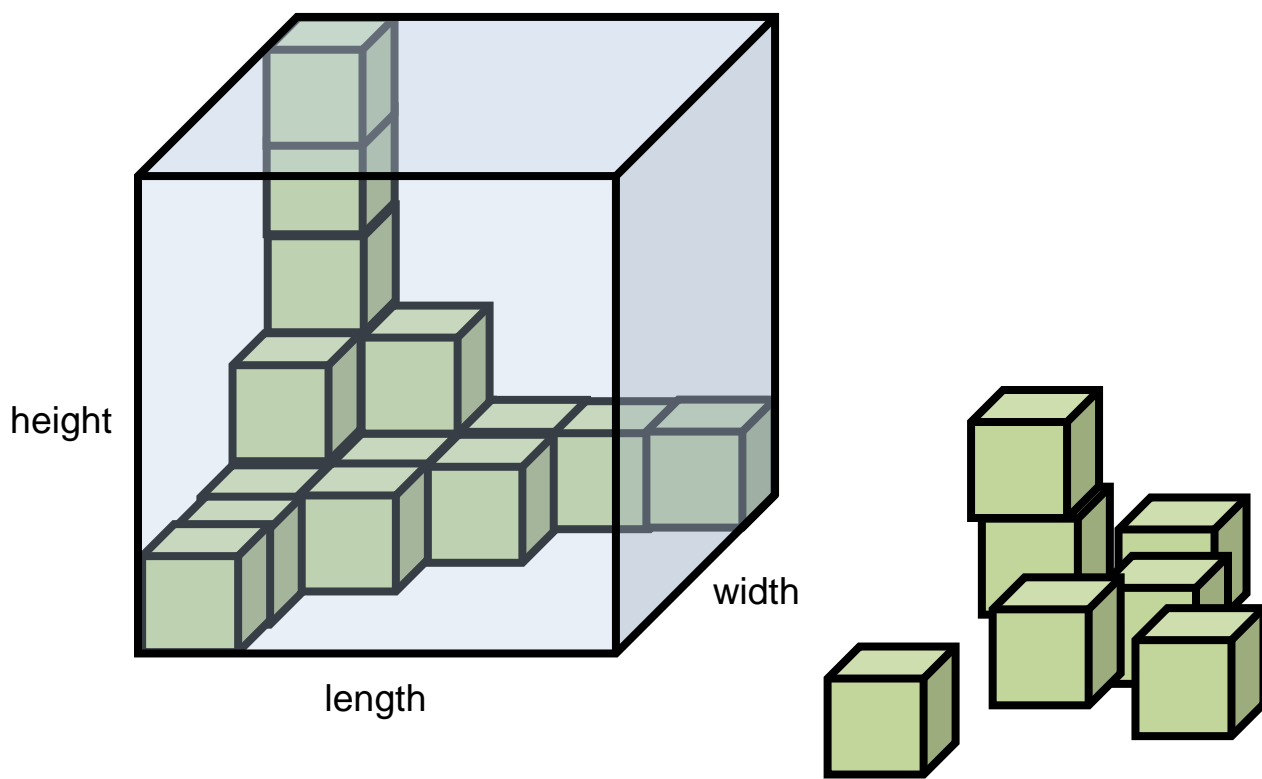
C = perimeter of a circle

Area of a Circle



$$A = \pi r^2$$

Volume of a Prism

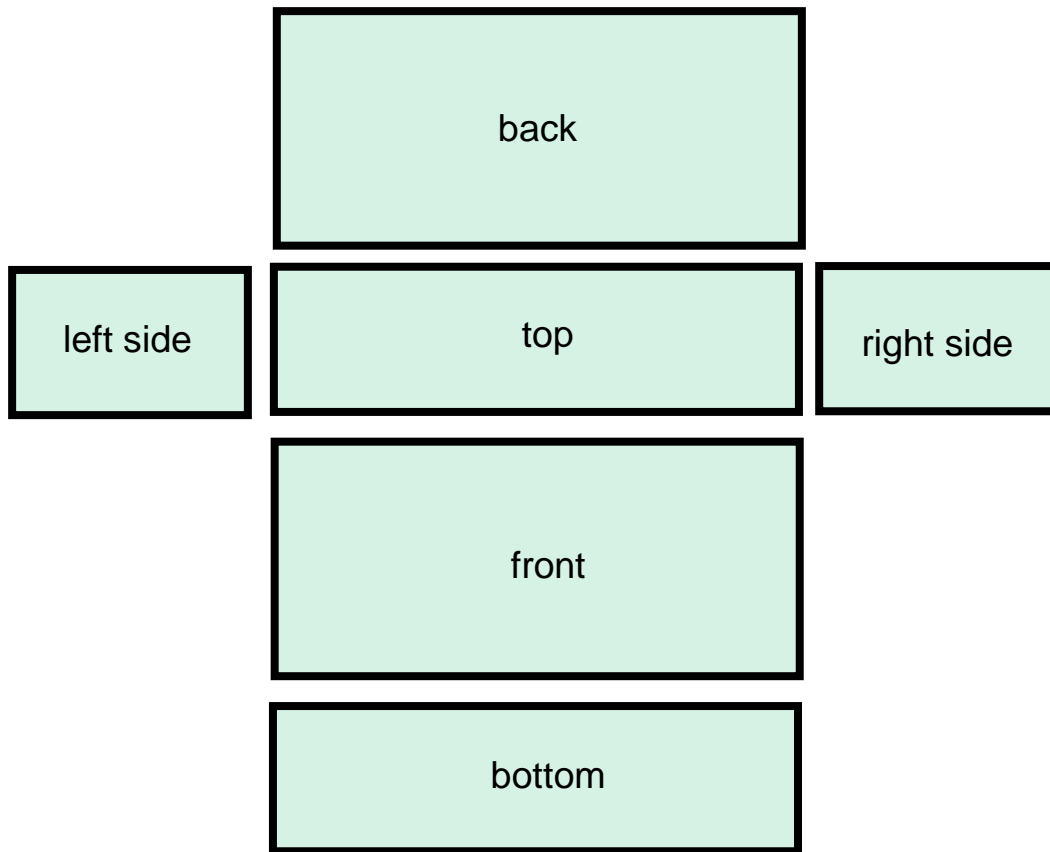
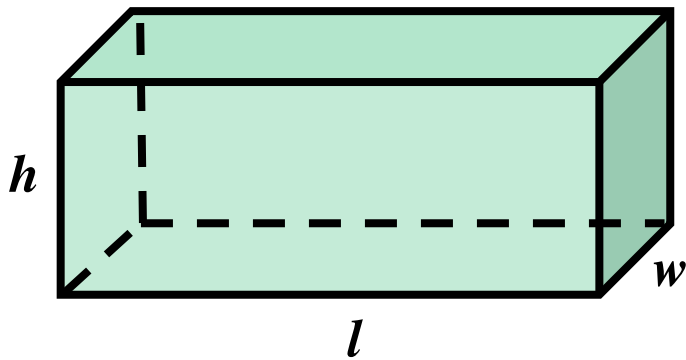


Volume = length \times width \times height

$$V = lwh$$

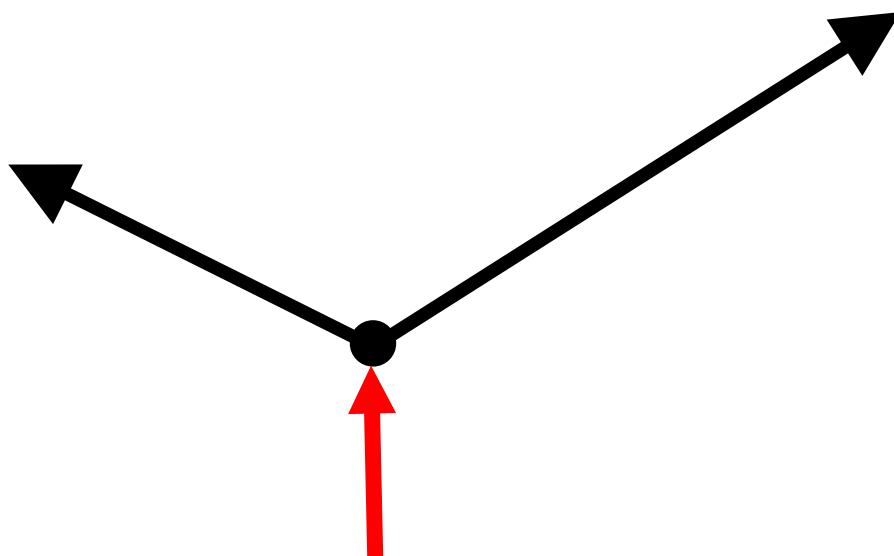
measured in cubic units

Surface Area

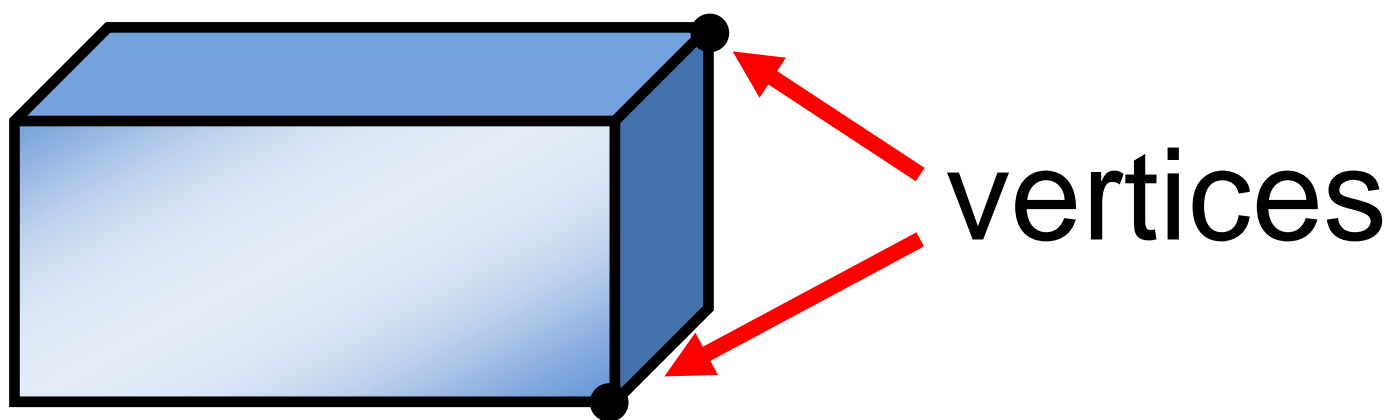


Surface Area (S.A.) = sum of areas of faces

Vertex

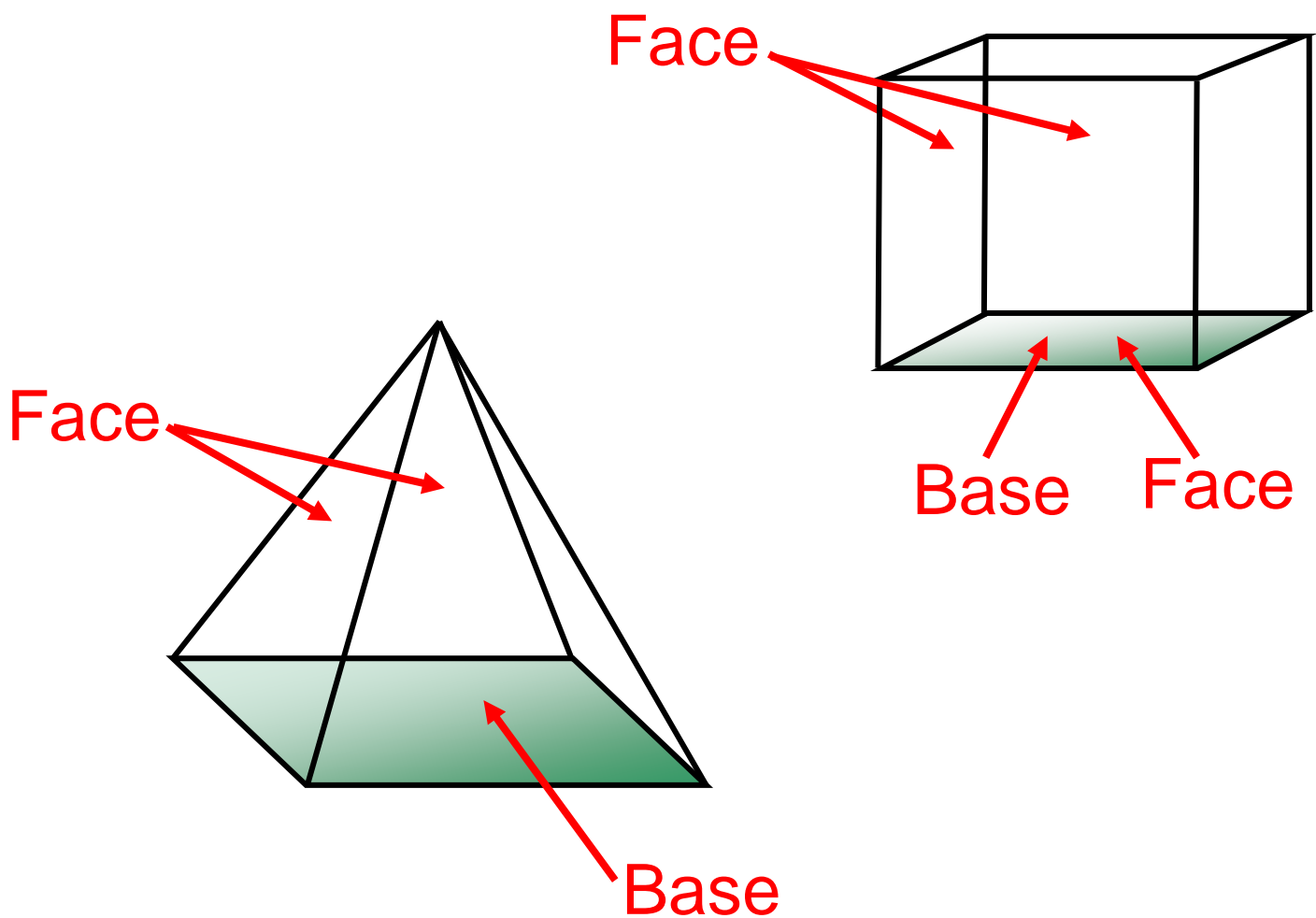


vertex

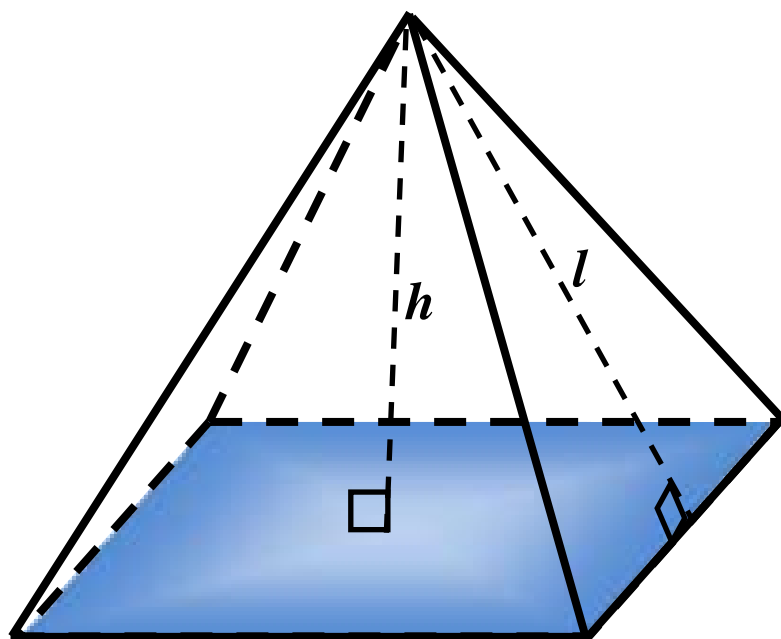


vertices

Face and Base

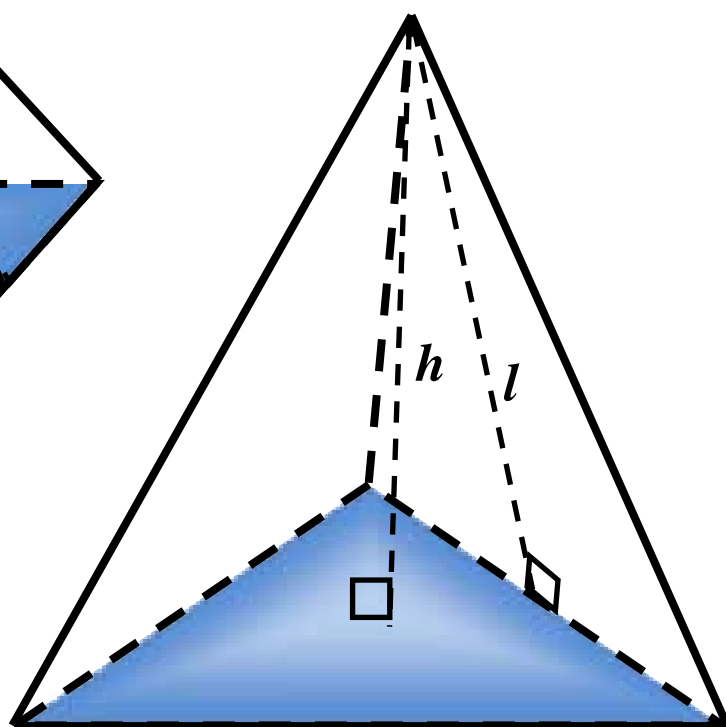


Pyramid



B = area of base
 p = perimeter of base

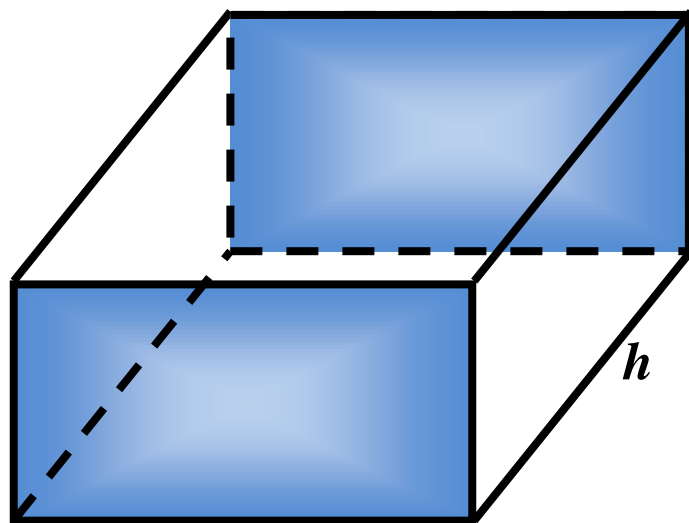
$$V = \frac{1}{3}Bh$$



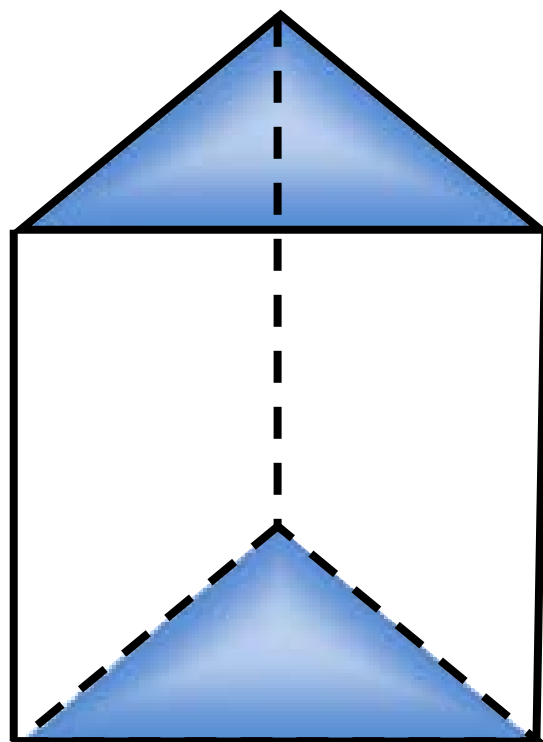
B = area of base
 p = perimeter of base

$$S.A. = \frac{1}{2}lp + B$$

Prism



B = area of base
 p = perimeter of base

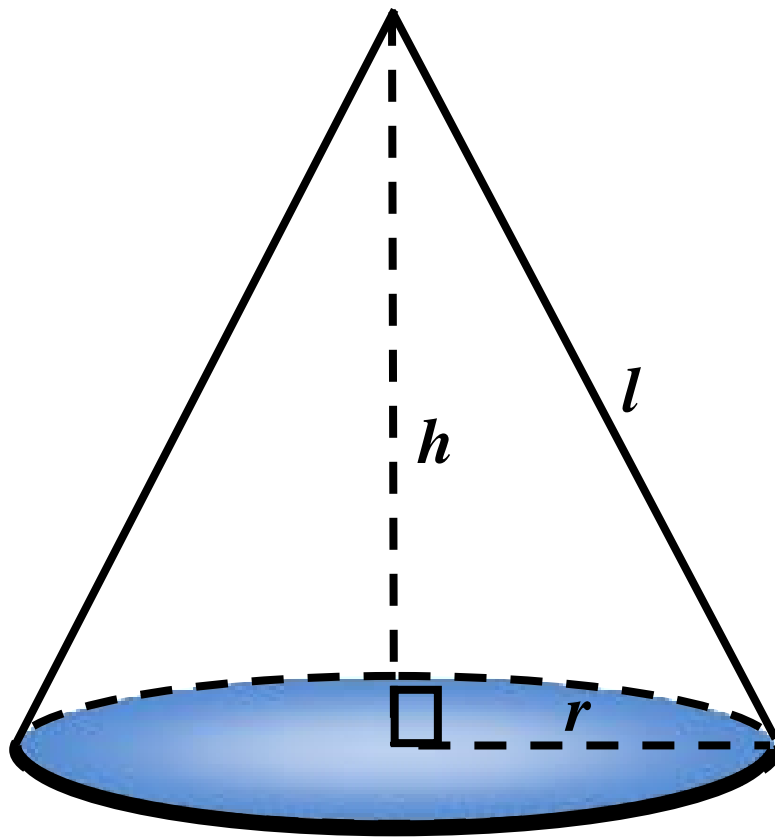


B = area of base
 p = perimeter of base

$$V = Bh$$

$$S.A. = hp + 2B$$

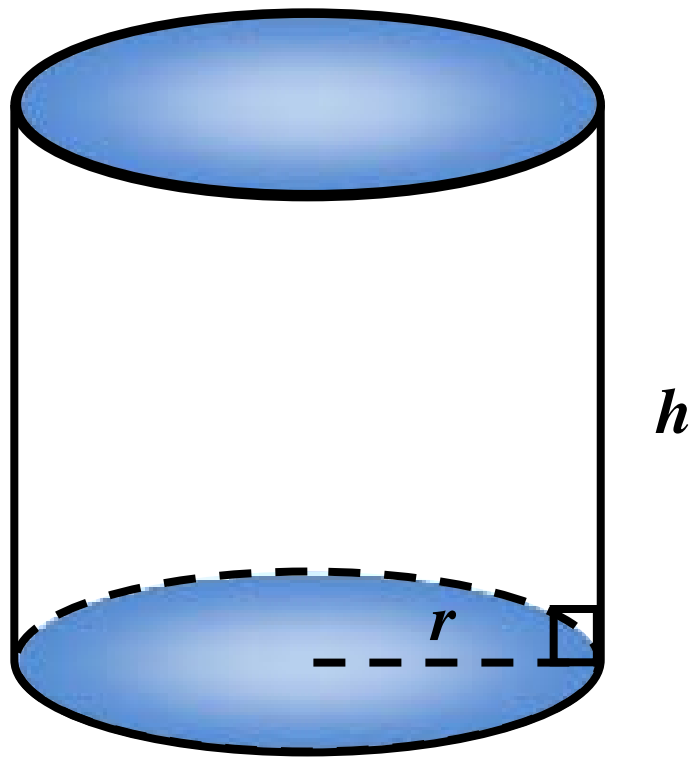
Cone



$$V = \frac{1}{3} \pi r^2 h$$

$$S.A. = \pi r^2 + \pi r l$$

Cylinder

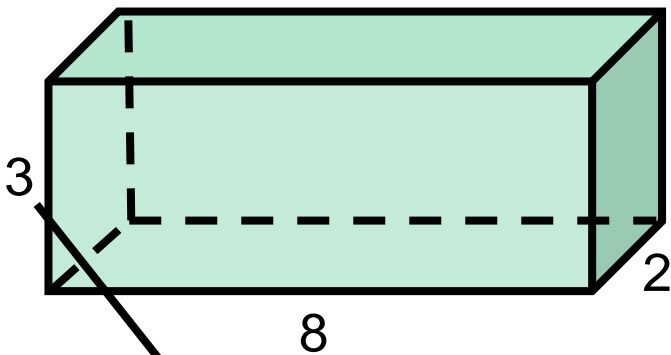


$$V = \pi r^2 h$$

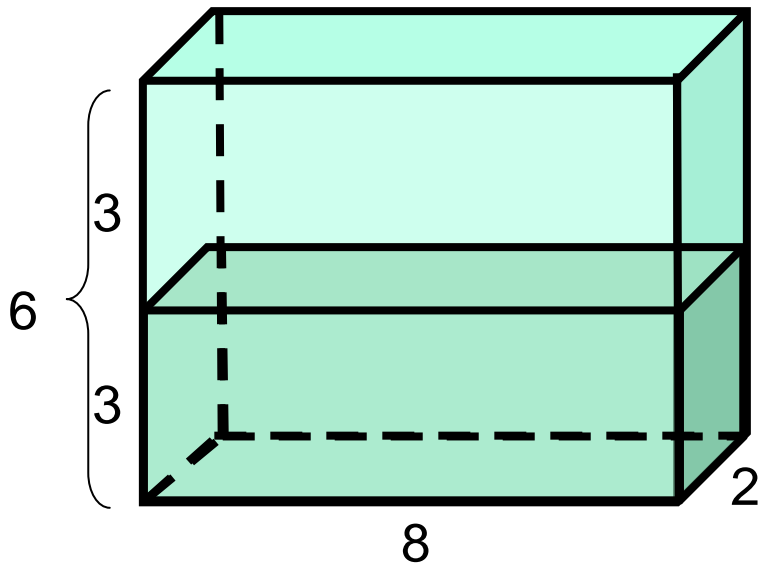
$$S.A. = 2\pi r^2 + 2\pi r h$$

Volume

Changing one attribute



Height increases to 6



What happens to the volume?

Complementary Angles

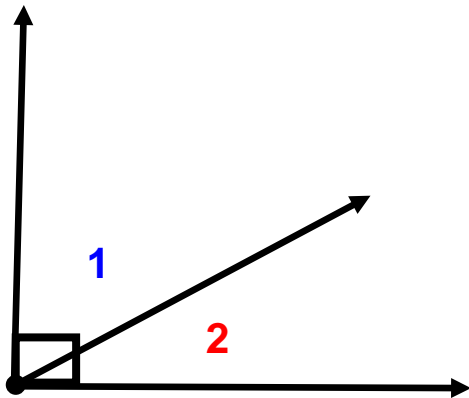


Fig 1

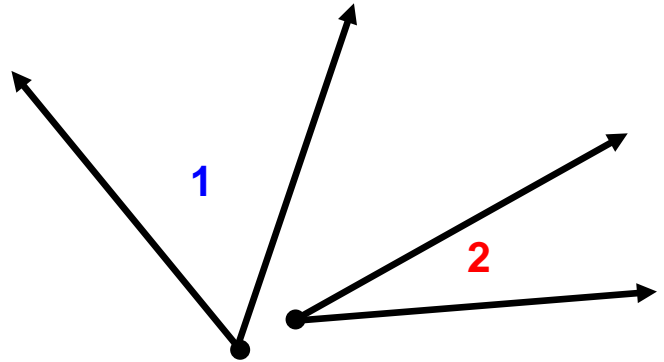
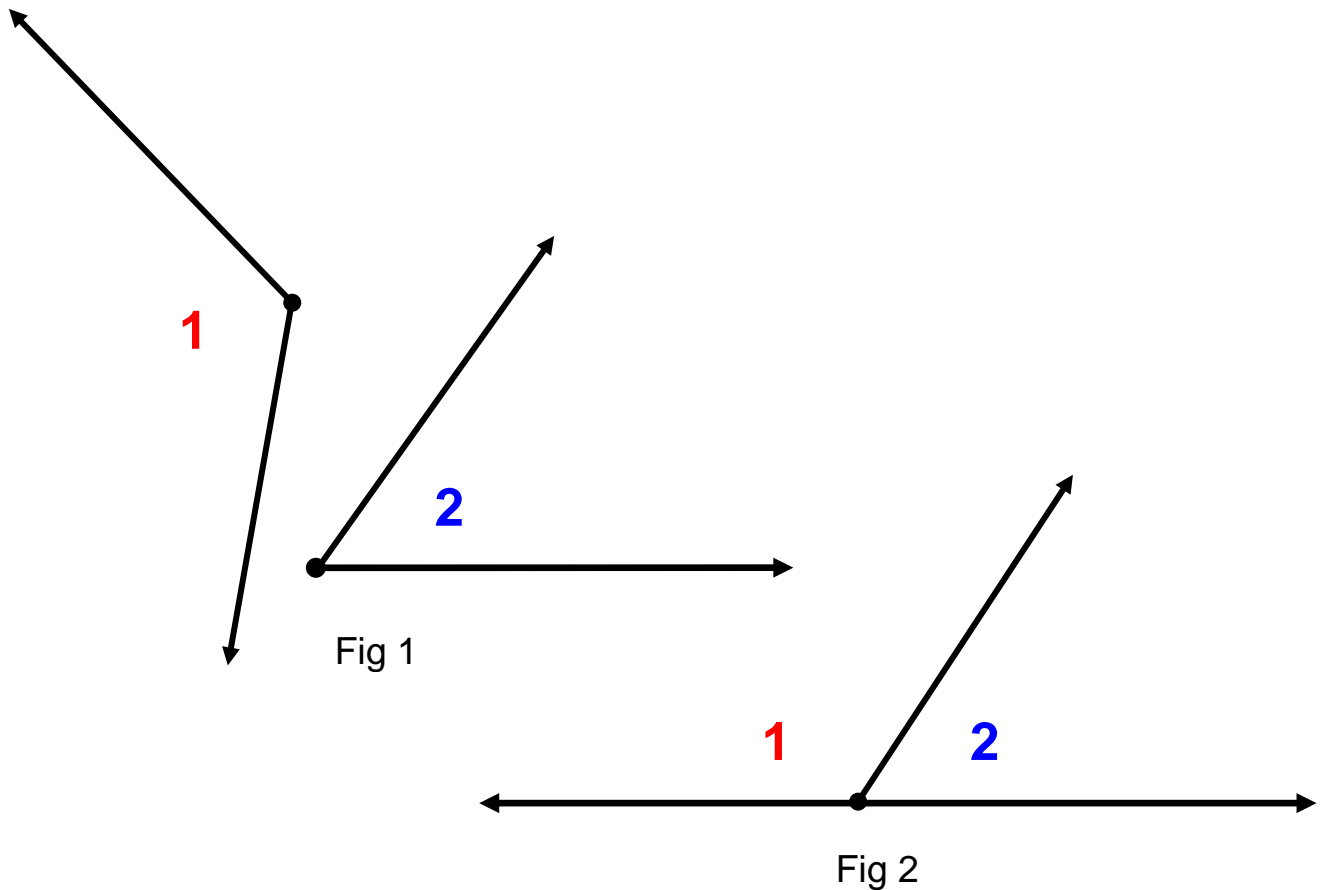


Fig 2

$$m\angle 1 + m\angle 2 = 90^\circ$$

in each figure

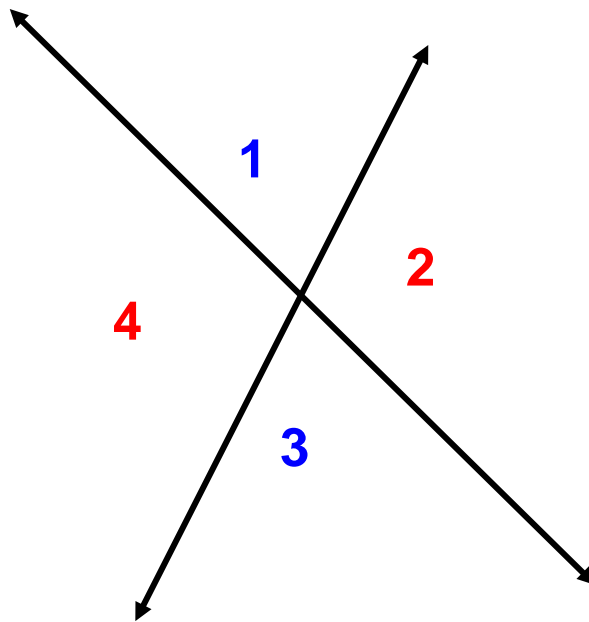
Supplementary Angles



$$m\angle 1 + m\angle 2 = 180^\circ$$

in each figure

Vertical Angles

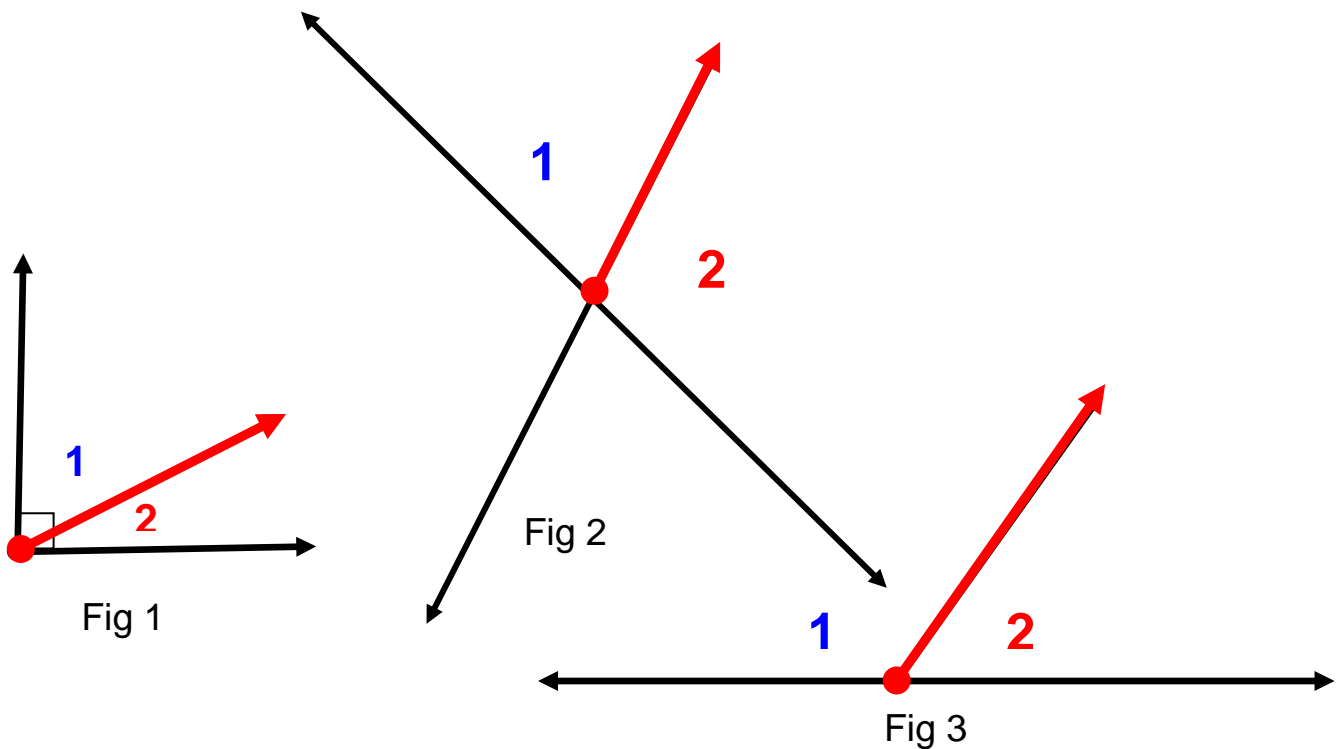


$\angle 1$ and $\angle 3$ are vertical angles.
 $\angle 2$ and $\angle 4$ are vertical angles.

$$\angle 1 \cong \angle 3 \text{ and } \angle 2 \cong \angle 4$$

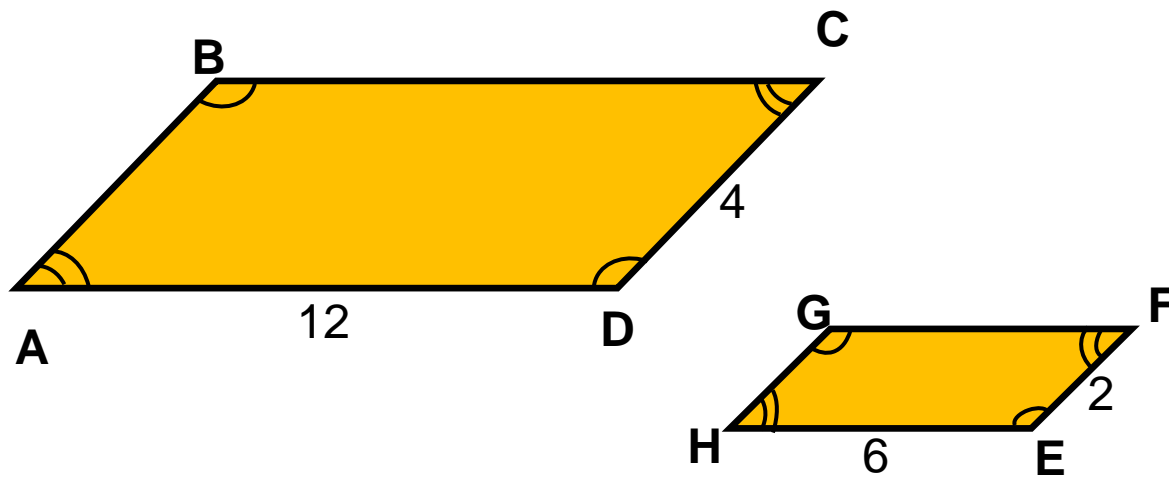
Adjacent Angles

$\angle 1$ is adjacent to $\angle 2$
in each figure



Share a common side and a
common vertex

Similar Figures

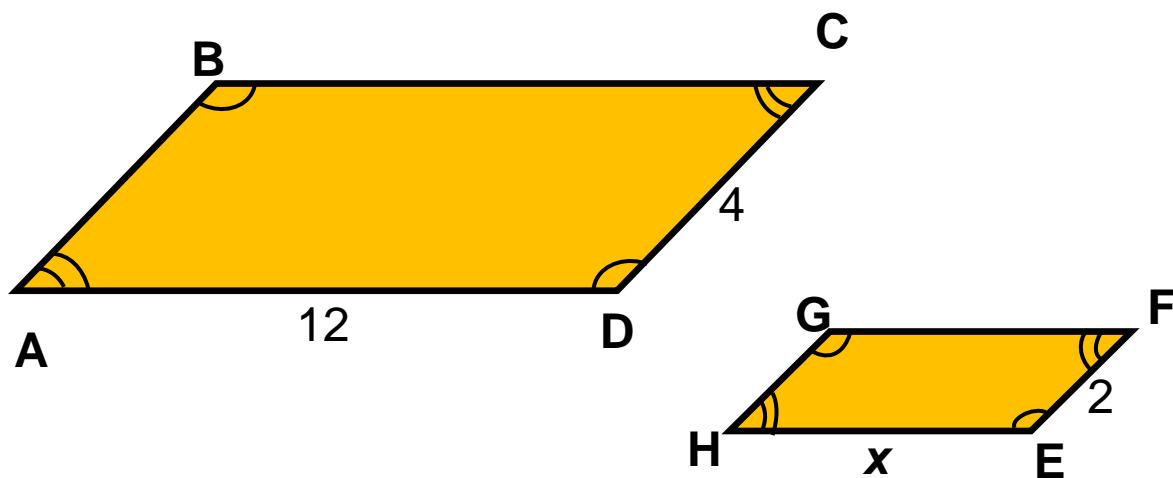


$$ABCD \sim HGFE$$

Angles	Sides
$\angle A$ corresponds to $\angle H$	\overline{AB} corresponds to \overline{HG}
$\angle B$ corresponds to $\angle G$	\overline{BC} corresponds to \overline{GF}
$\angle C$ corresponds to $\angle F$	\overline{CD} corresponds to \overline{FE}
$\angle D$ corresponds to $\angle E$	\overline{DA} corresponds to \overline{EH}

Corresponding angles are congruent.
Corresponding sides are proportional.

Similar Figures and Proportions



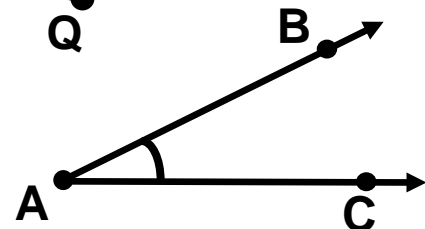
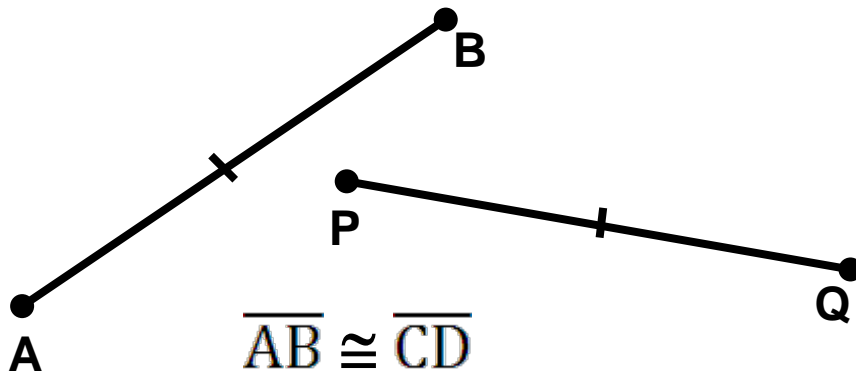
$$ABCD \sim HGFE$$

$$\frac{DC}{EF} = \frac{AD}{HE}$$

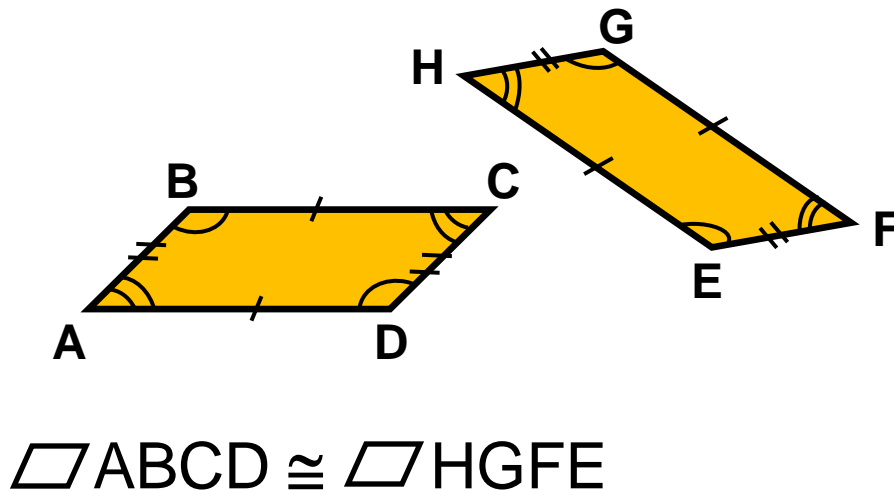
$$\frac{4}{2} = \frac{12}{x}$$

Congruent Figures

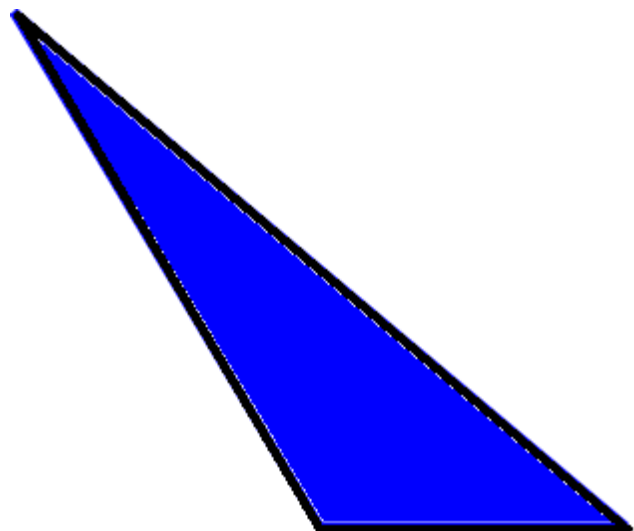
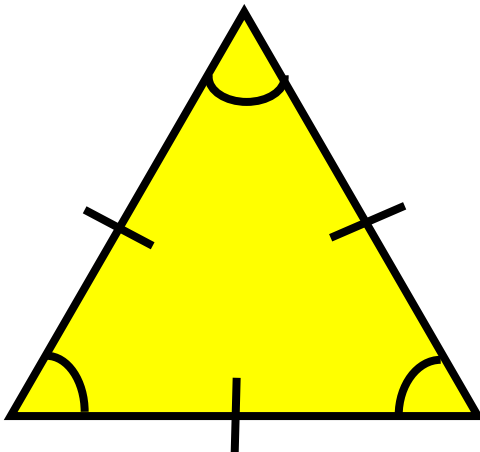
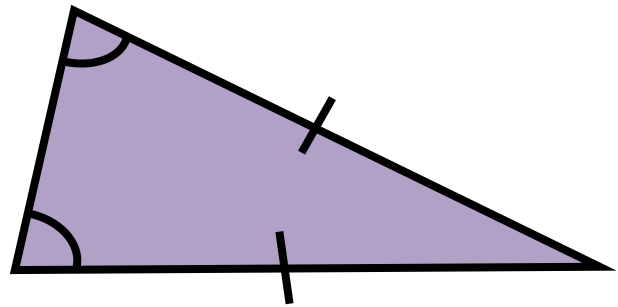
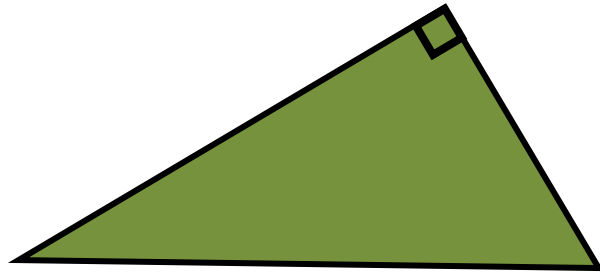
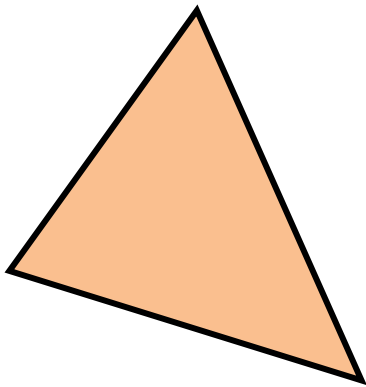
have exactly the
same shape and size



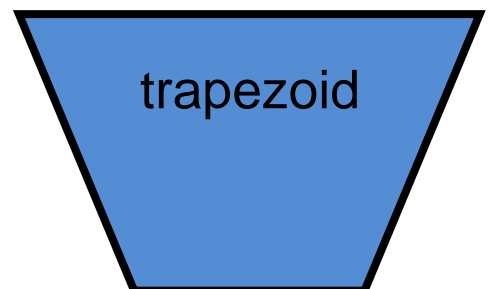
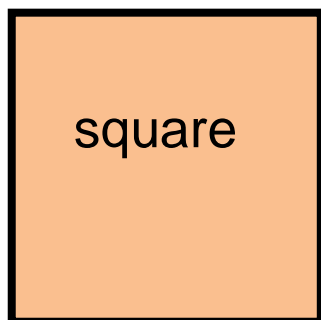
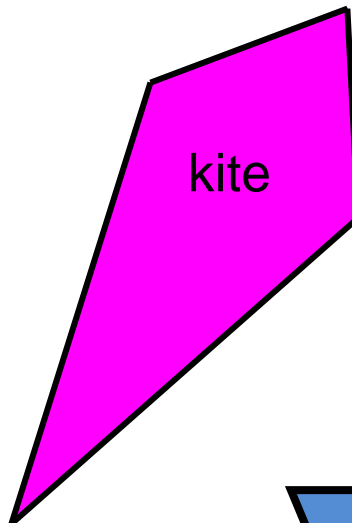
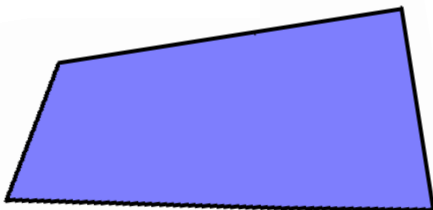
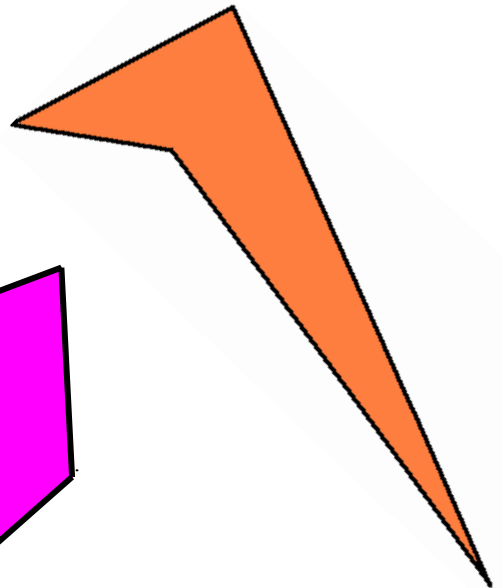
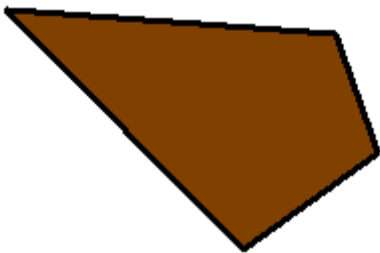
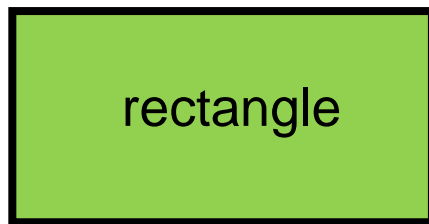
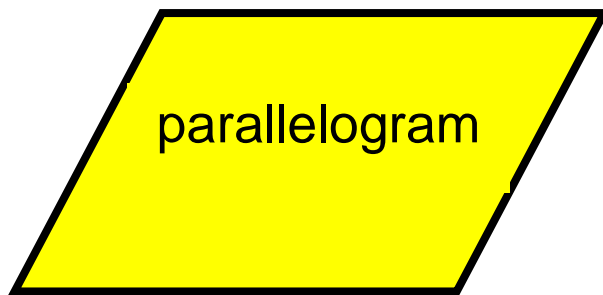
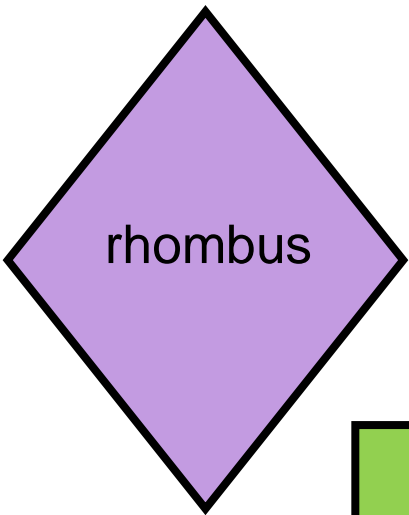
$$\angle BAC \cong \angle PQR$$



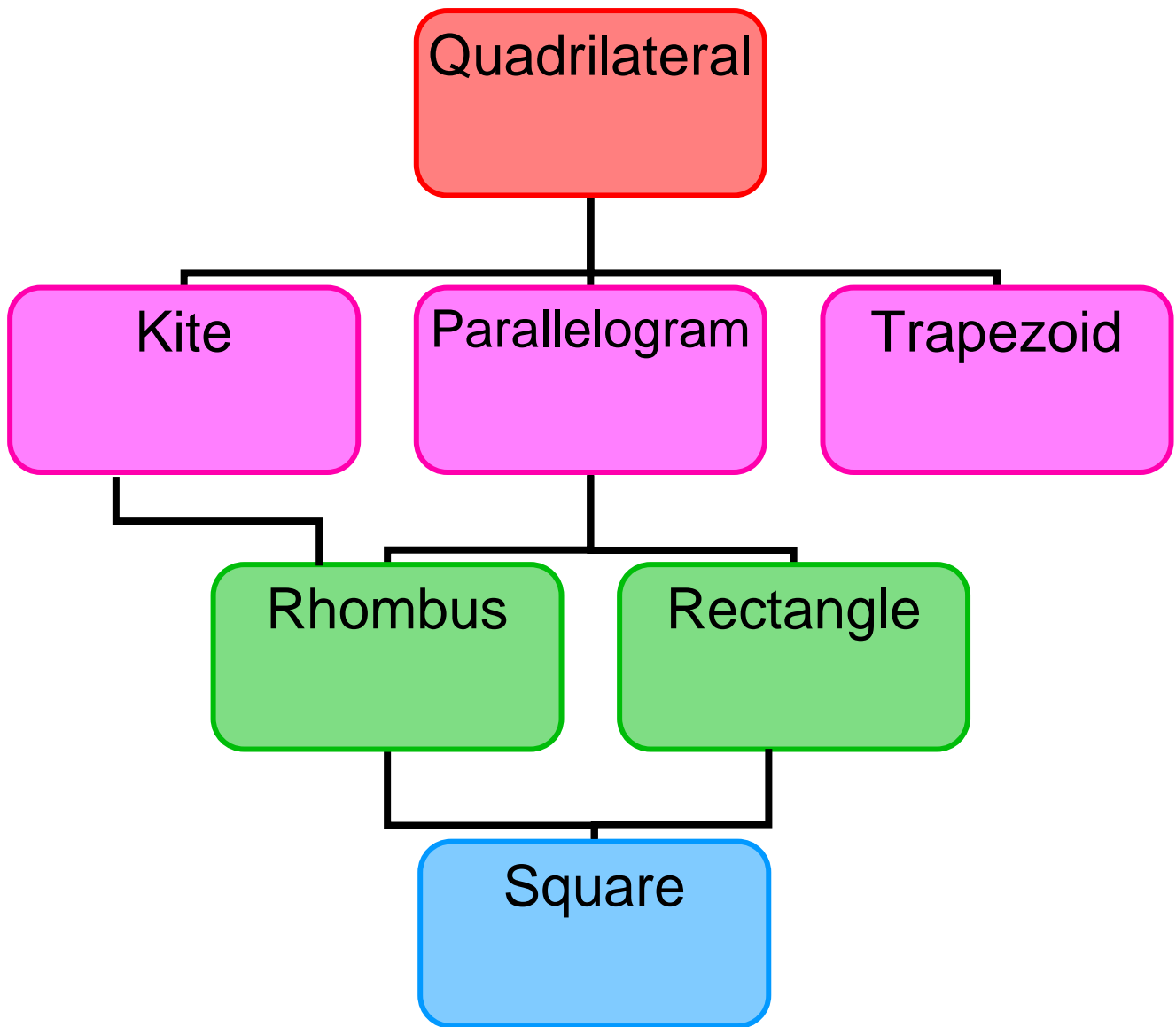
Triangles



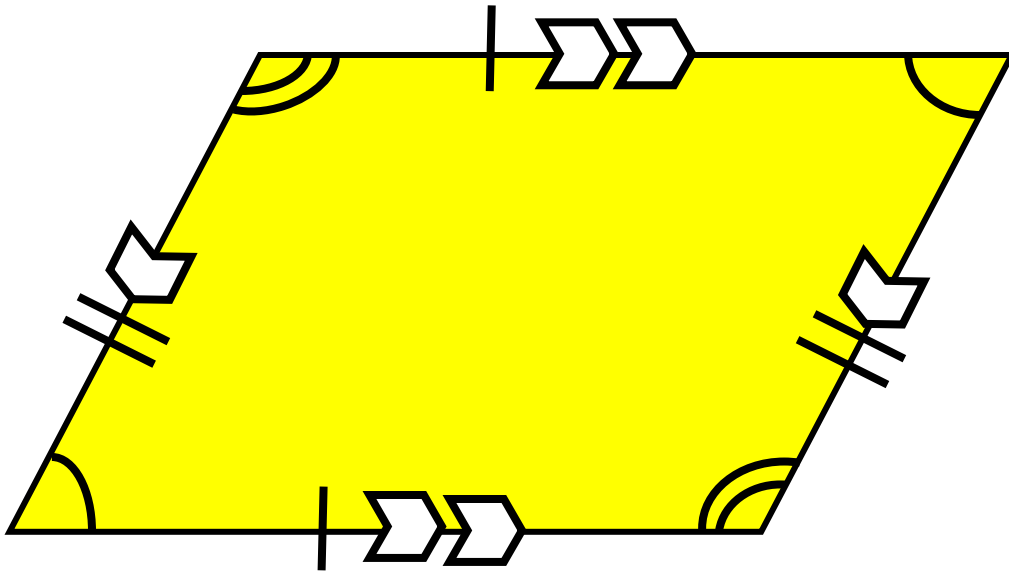
Quadrilaterals



Quadrilaterals Relationships

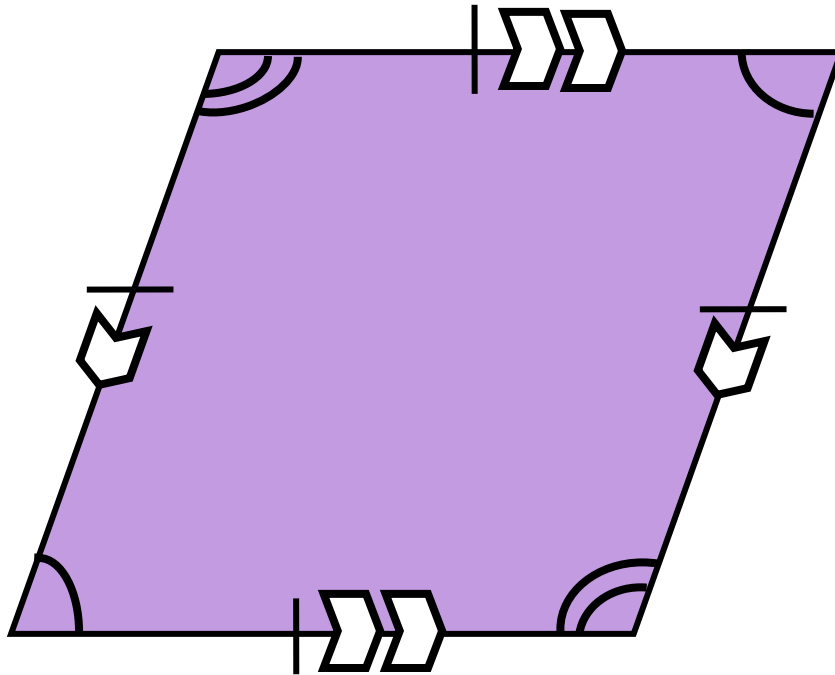


Parallelogram



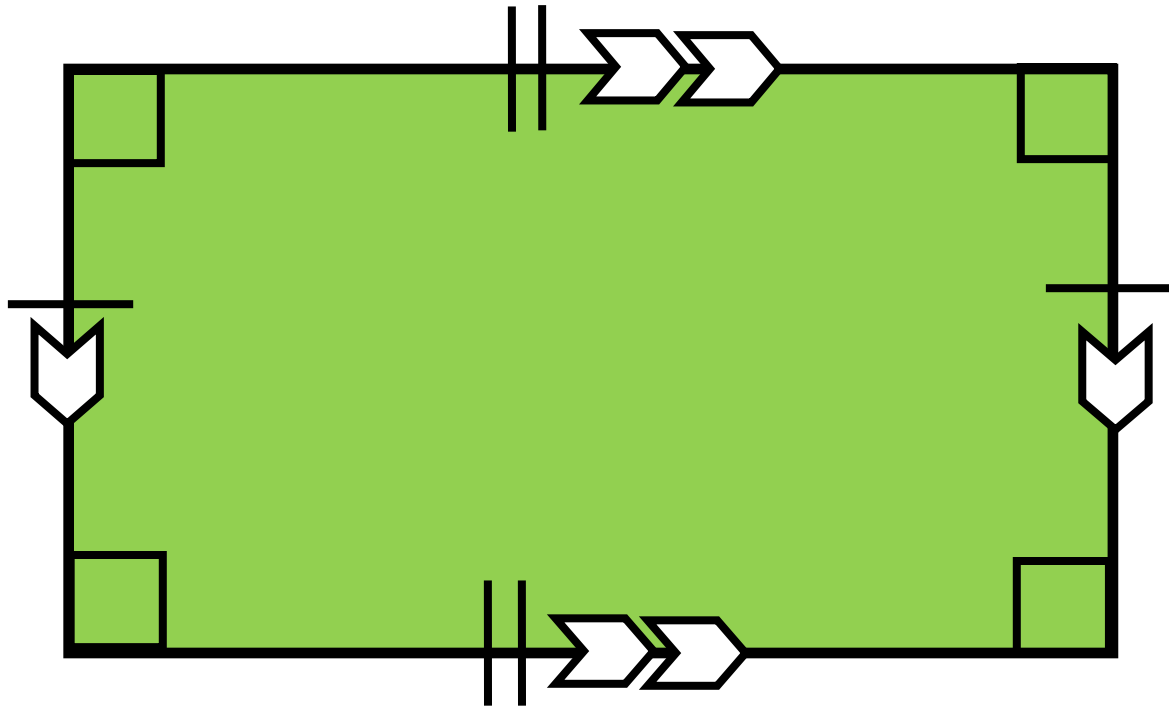
- opposite angles are congruent
- 2 pairs of parallel sides
- 2 pairs of opposite sides congruent

Rhombus



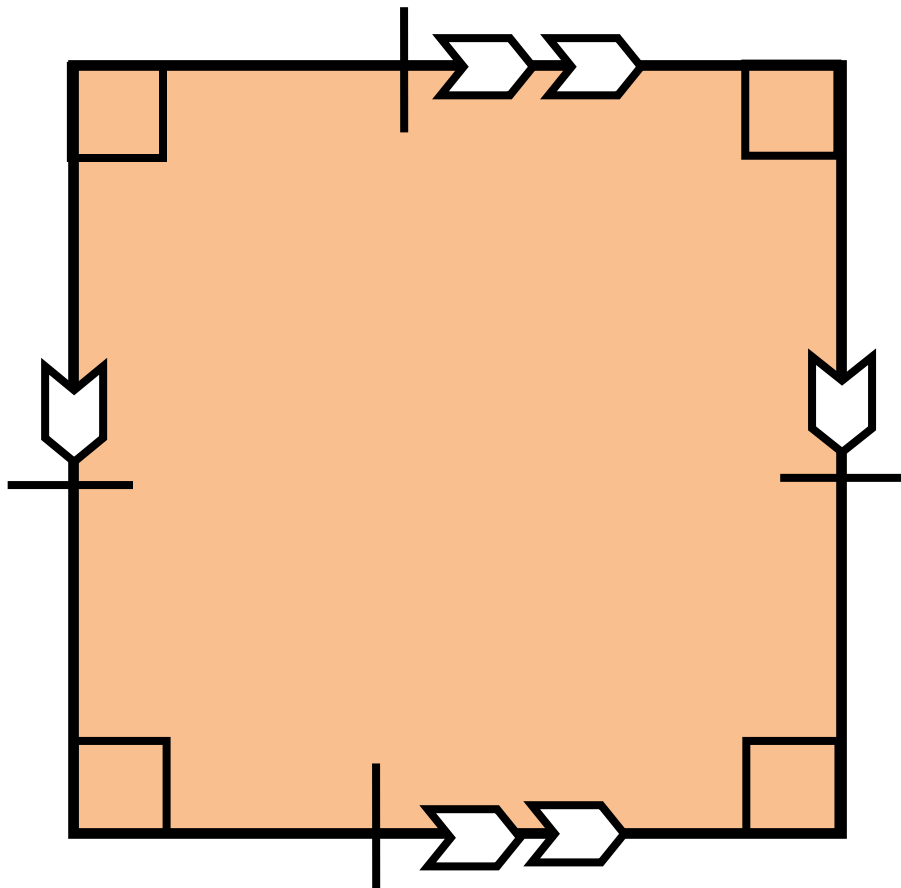
- opposite angles are congruent
- 2 pairs of parallel sides
- 4 congruent sides

Rectangle



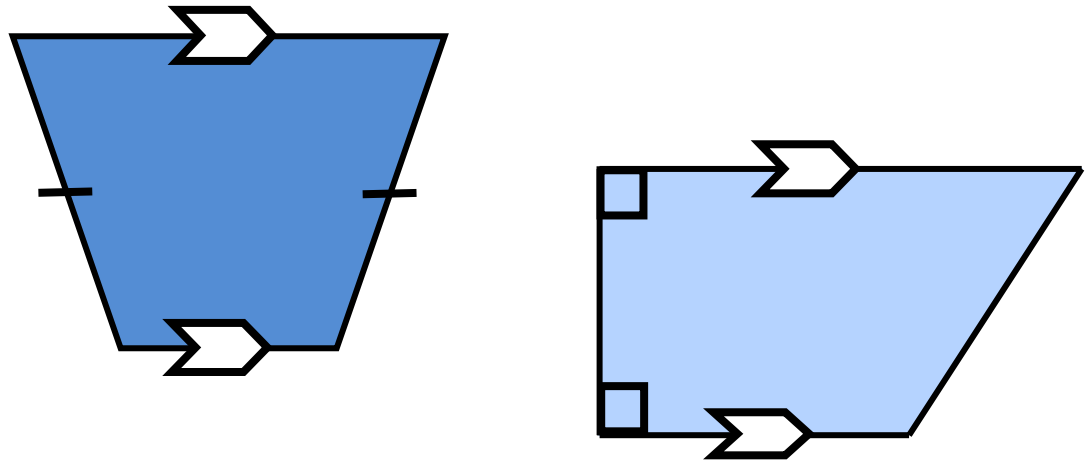
- 4 right angles
- 2 pairs of parallel sides
- 2 pairs of opposite sides congruent

Square



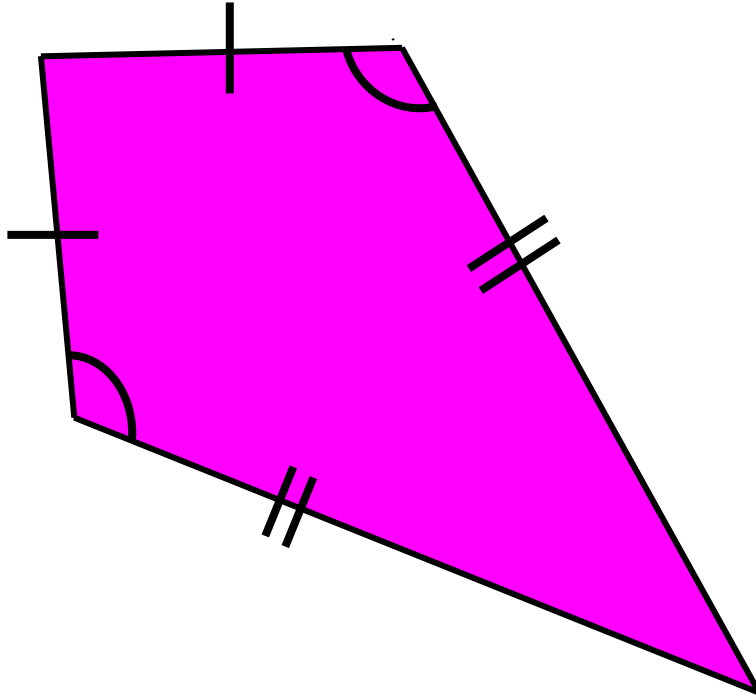
- 4 right angles
- 2 pairs of parallel sides
- 4 congruent sides

Trapezoid



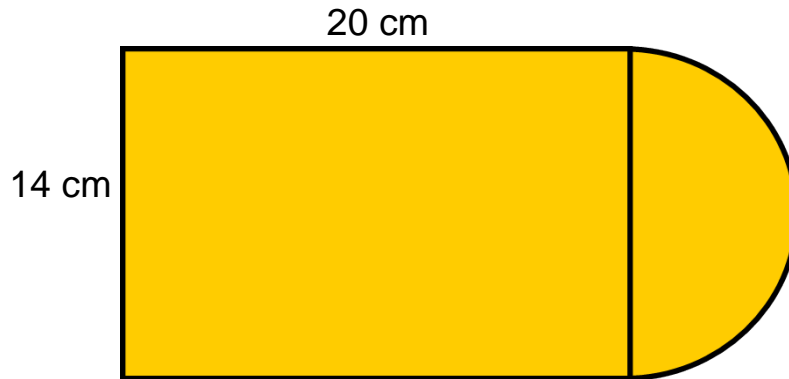
- may have zero or two right angles
- exactly one pair of parallel sides
- may have one pair of congruent sides

Kite

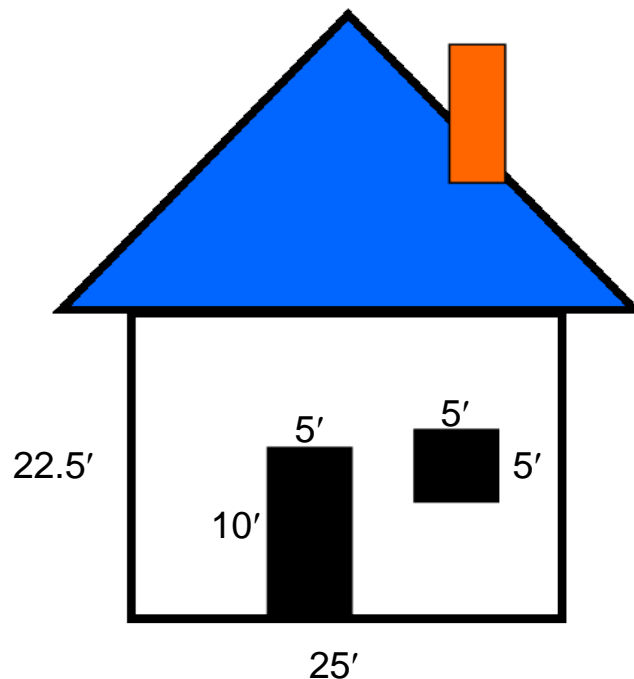


- one pair of opposite congruent angles
- 2 pairs of adjacent congruent sides

Composite Figures

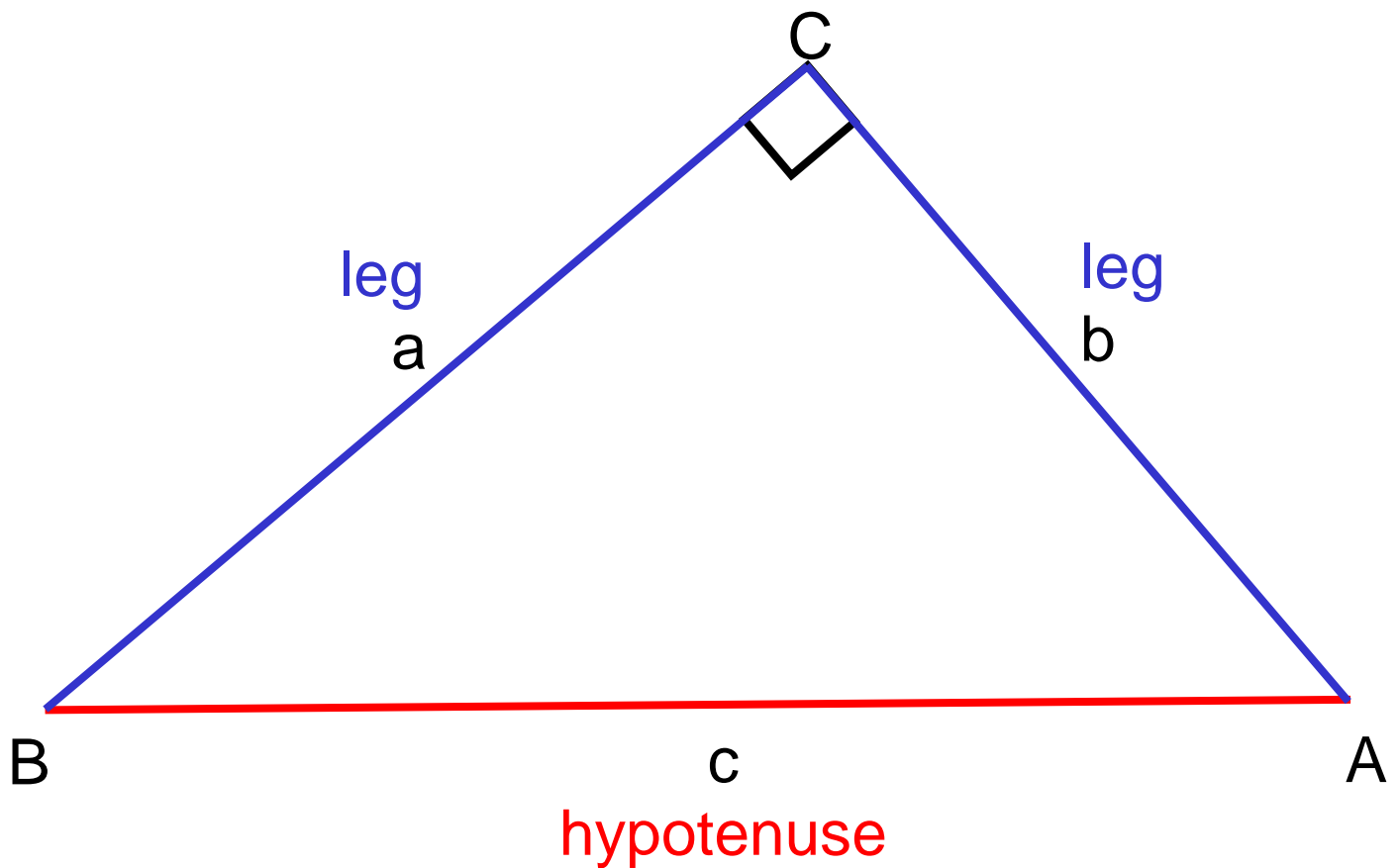


Subdivide into other figures then determine the perimeter.

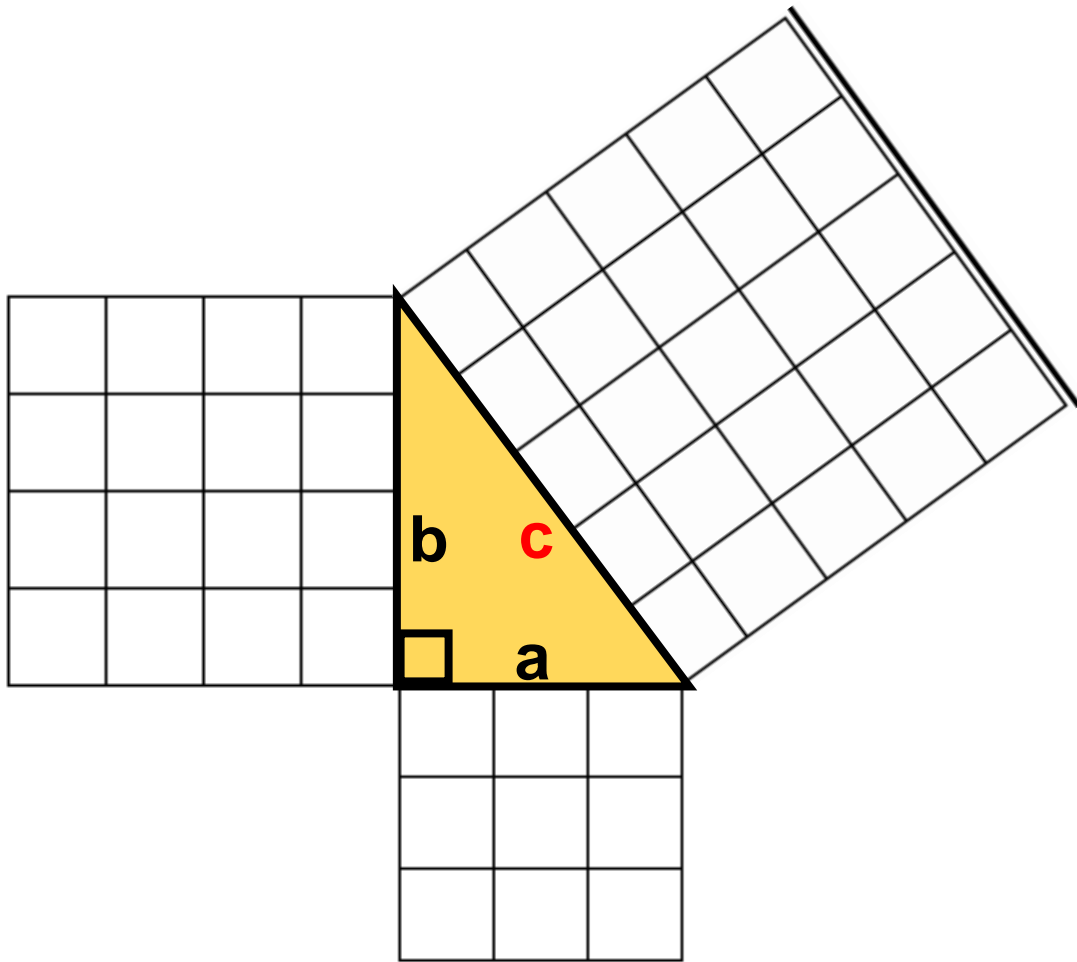


Subdivide into other figures then determine the area.

Right Triangle

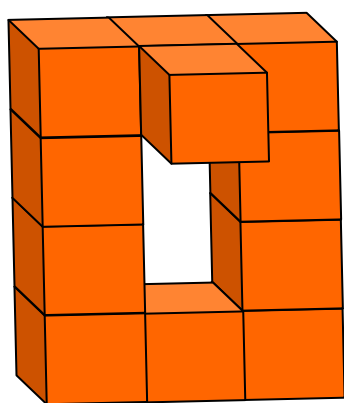


Pythagorean Theorem

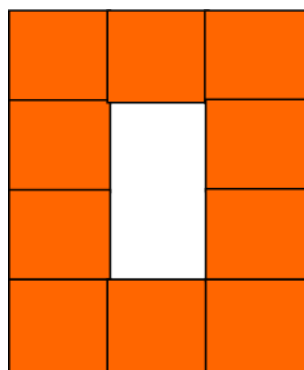


$$a^2 + b^2 = c^2$$

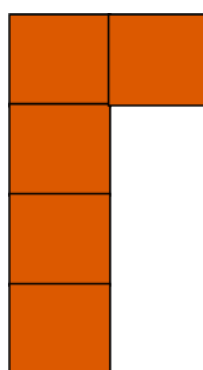
Three Dimensional Models



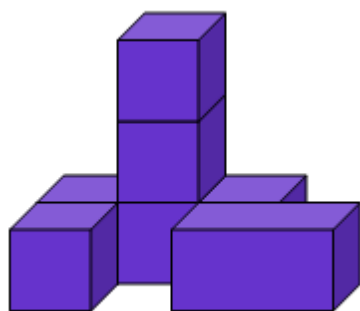
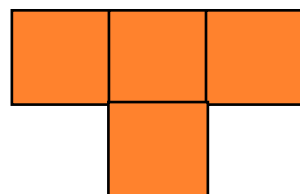
front



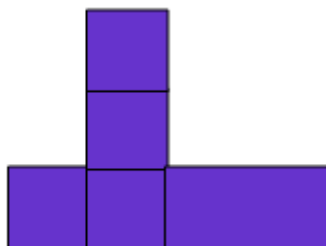
side



top



front



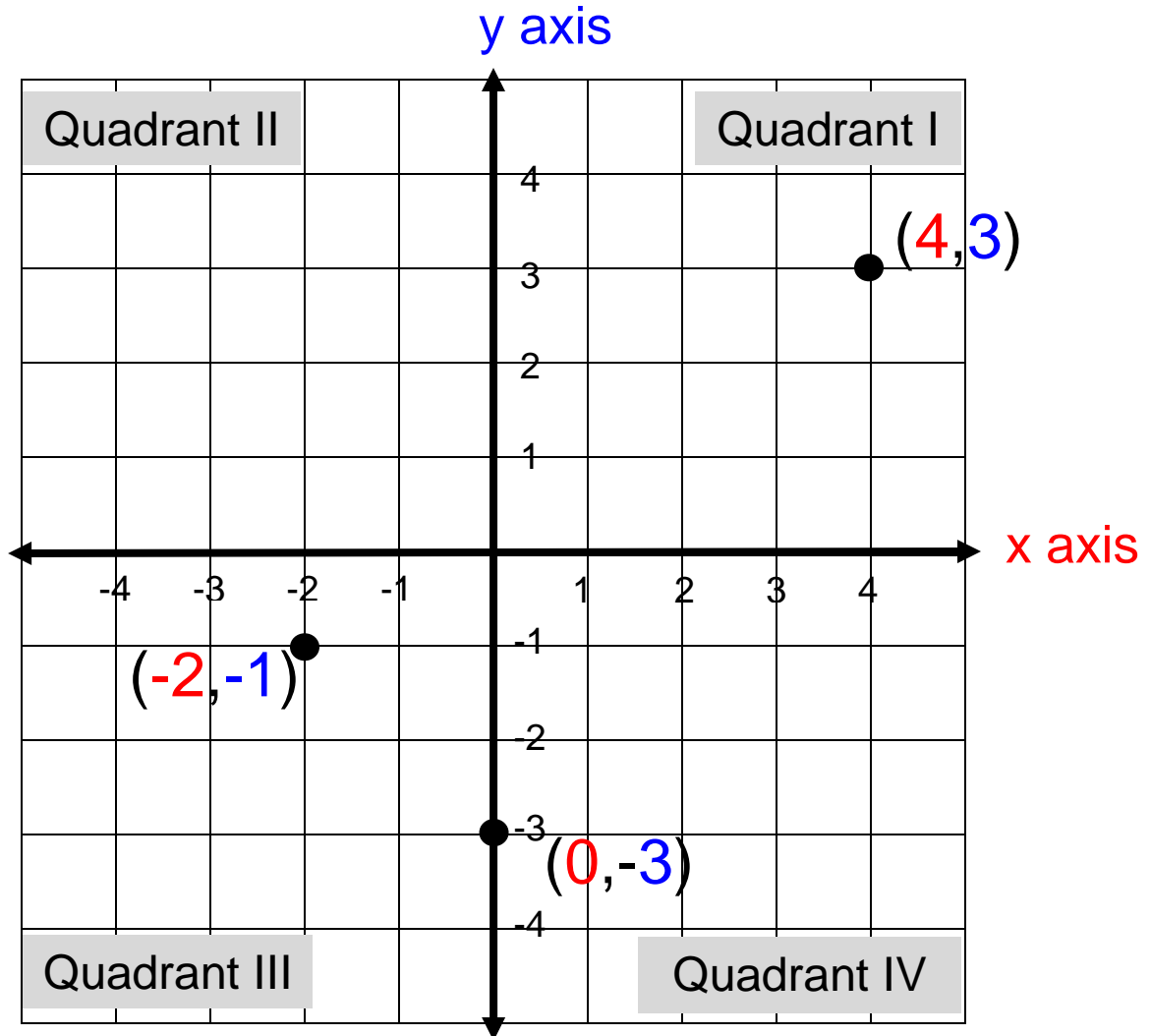
side



top

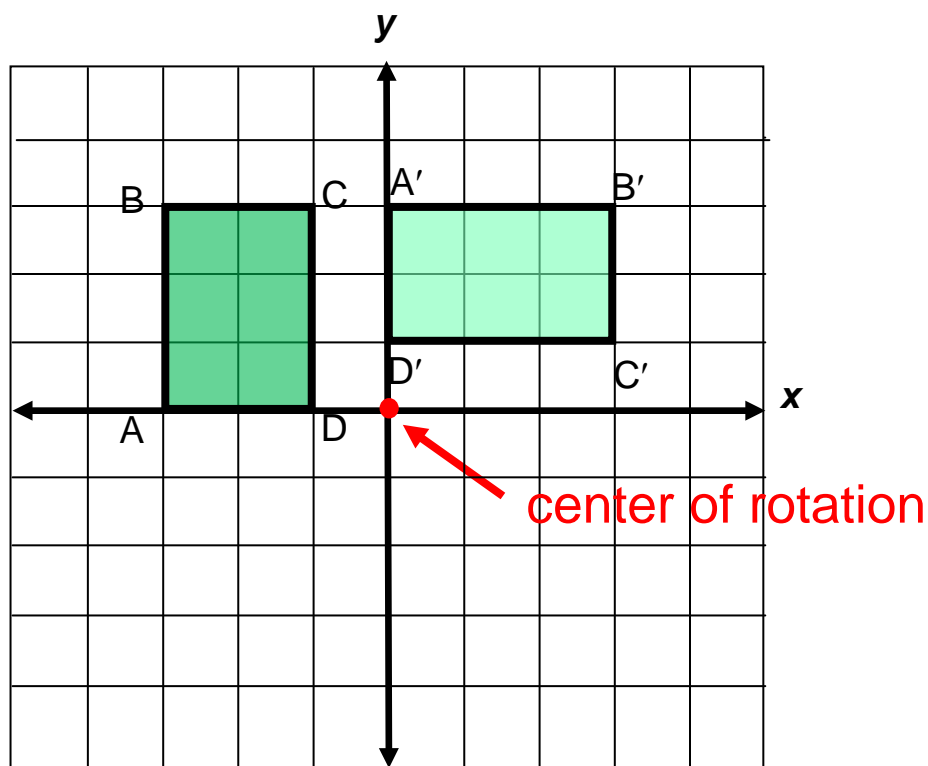


Coordinate Plane



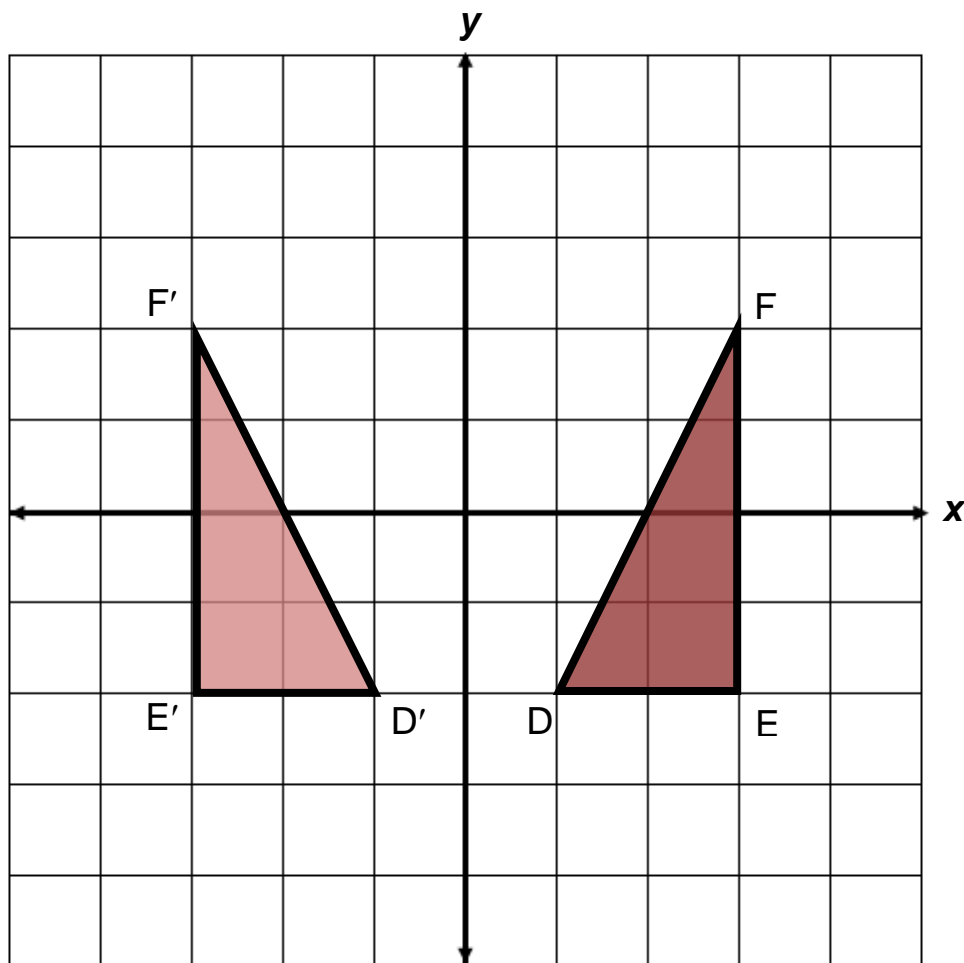
ordered pair (x, y)

Rotation



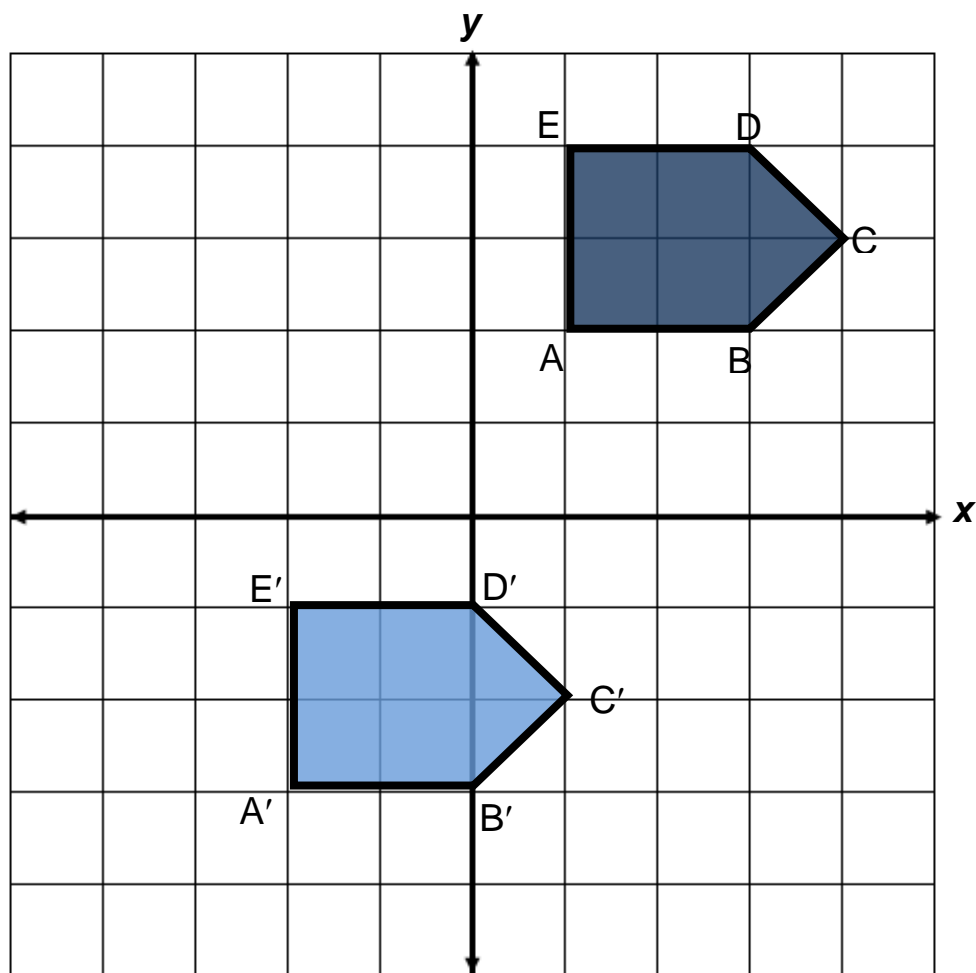
Preimage	Image
A(-3,0)	A'(0,3)
B(-3,3)	B'(3,3)
C(-1,3)	C'(3,1)
D(-1,0)	D'(0,1)

Reflection



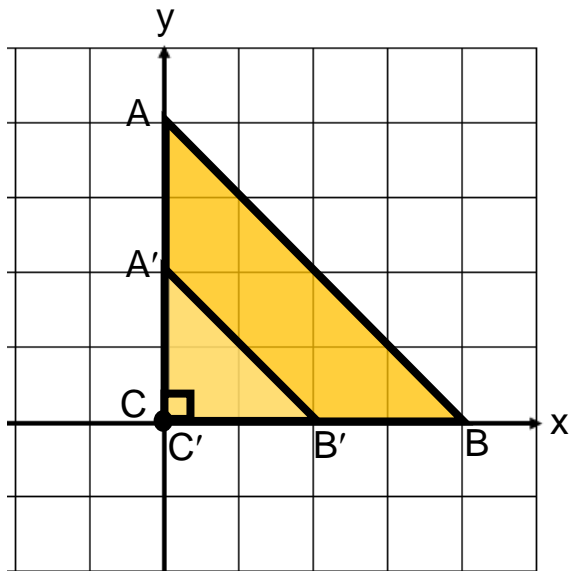
Preimage	Image
D(1,-2)	D'(-1,-2)
E(3,-2)	E'(-3,-2)
F(3,2)	F'(-3,2)

Translation



Preimage	Image
A(1,2)	A'(-2,-3)
B(3,2)	B'(0,-3)
C(4,3)	C'(1,-2)
D(3,4)	D'(0,-1)
E(1,4)	E'(-2,-1)

Dilation



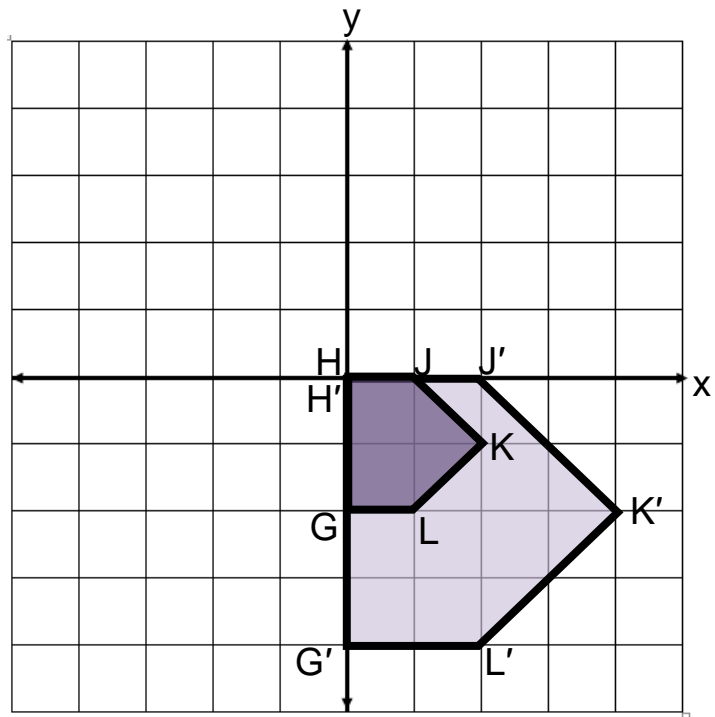
center of dilation = $(0,0)$

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

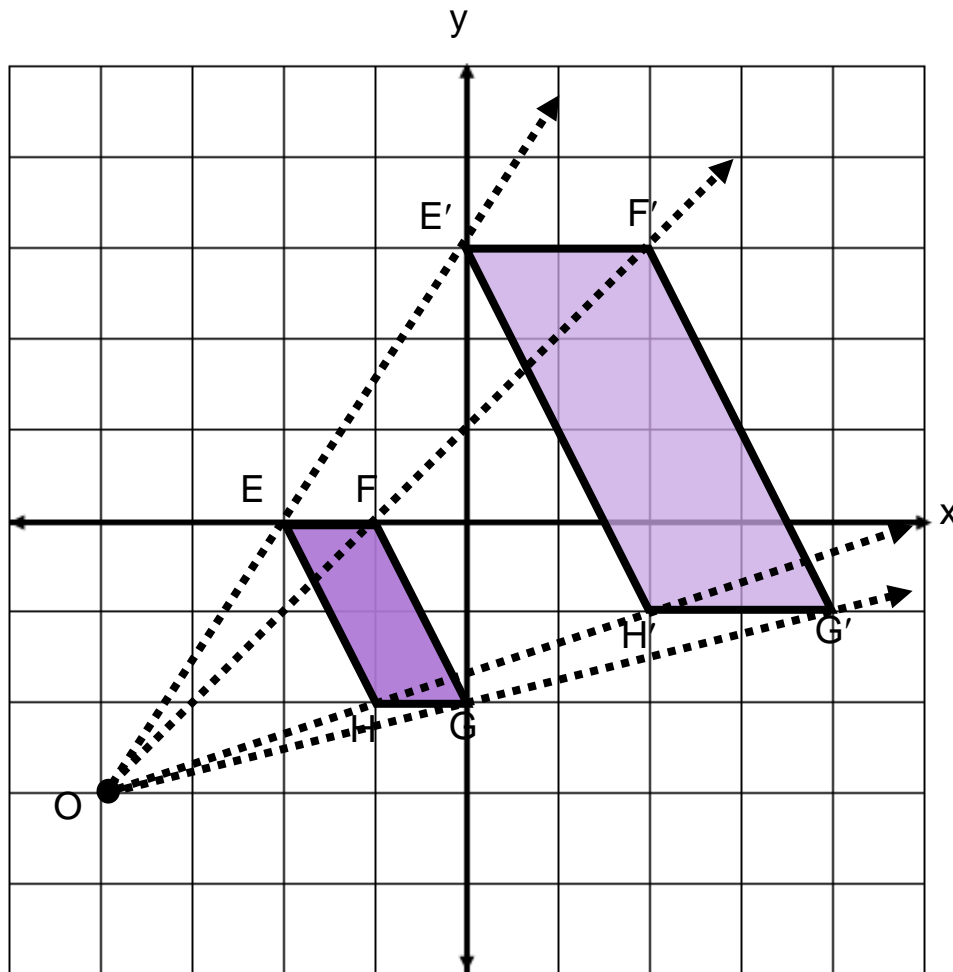
Preimage	Image
A(0,4)	A'(0,2)
B(4,0)	B'(2,0)
C(0,0)	C'(0,0)

center of dilation = $(0,0)$
scale factor = 2

Preimage	Image
G(0,-2)	G'(0,-4)
H(0,0)	H'(0,0)
J(1,0)	J'(2,0)
K(2,-1)	K'(4,-2)
L(1,-2)	L'(2,-4)



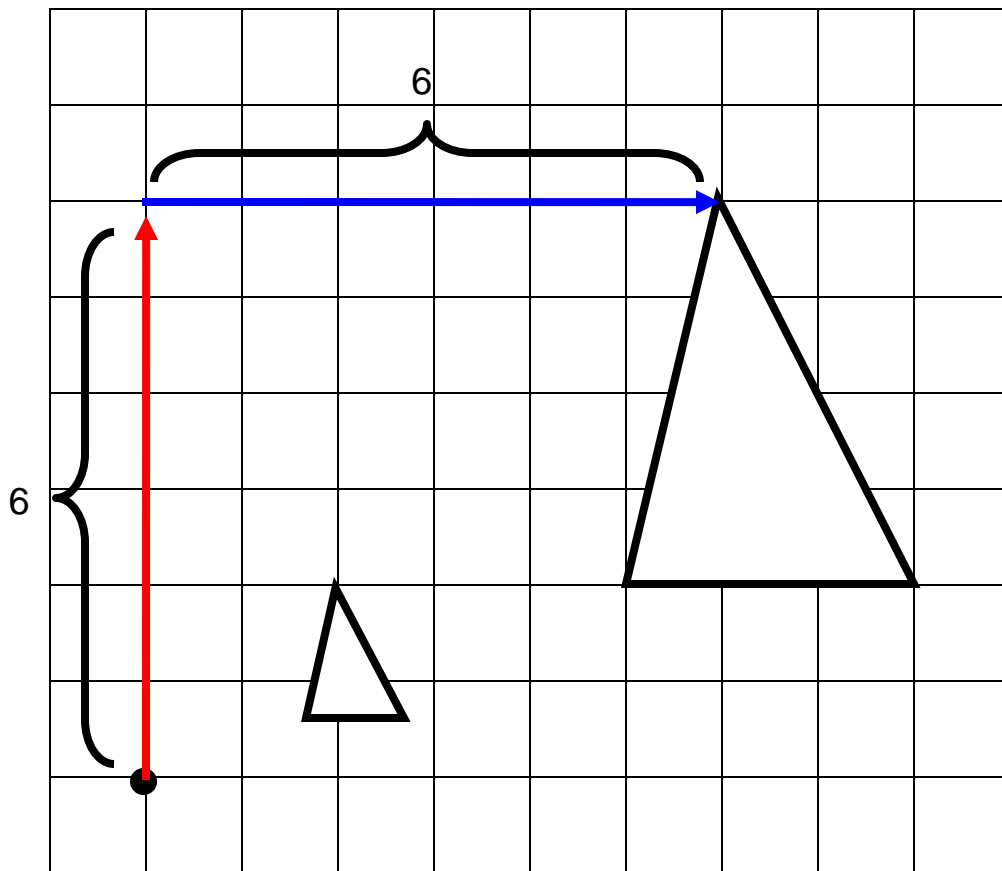
Dilation



center of dilation = $(-4, -3)$
scale factor = 2

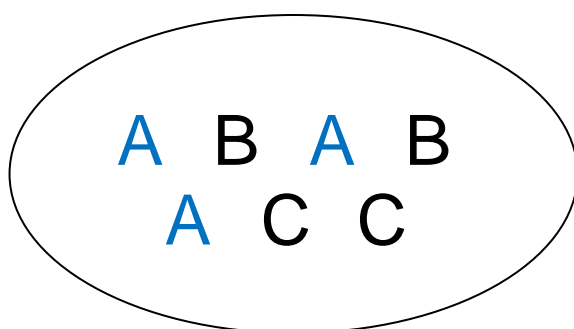
Preimage	Image
E(-2,0)	E'(0,3)
F(-1,0)	F'(2,3)
G(0, -2)	G'(4,-1)
H(-1,-2)	H'(2,-1)

Dilation

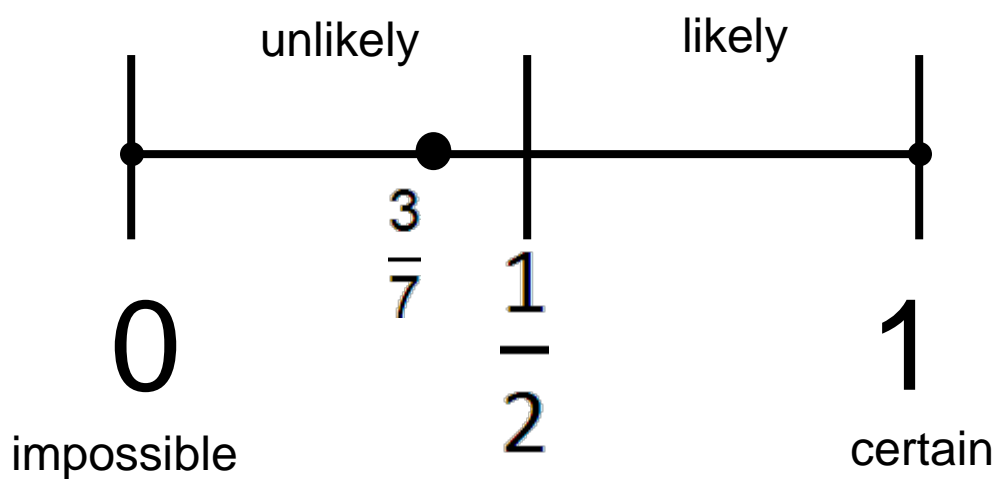


center of dilation = C
scale factor = $\frac{1}{3}$

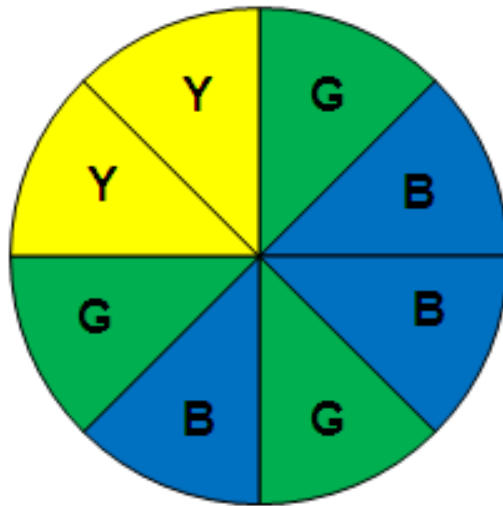
Probability



$$P(A) = \frac{3}{7}$$



Probability of Independent Events



$$P(\text{green}) = \frac{3}{8}$$

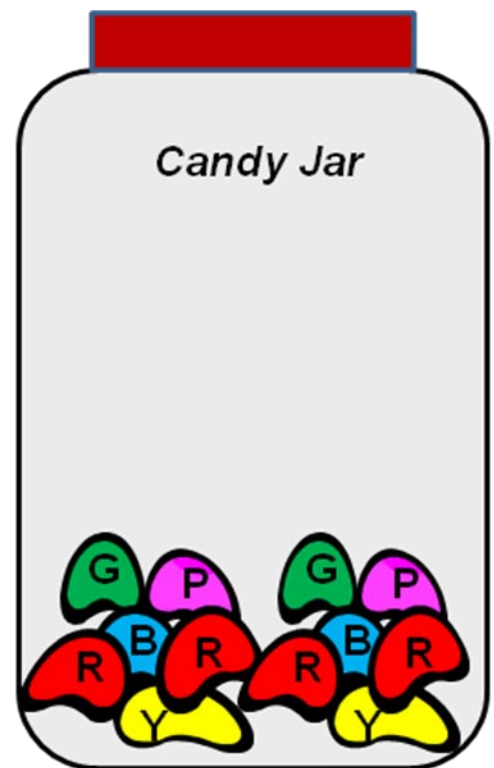
$$P(\text{yellow}) = \frac{2}{8} = \frac{1}{4}$$

$$P(\text{green and yellow}) =$$

$$P(\text{green}) \cdot P(\text{yellow}) = \frac{3}{8} \cdot \frac{1}{4} = \frac{3}{32}$$

Probability of Dependent Events

What is the probability of getting a **red** jelly bean on first pick and then without replacing it, getting a **green** jelly bean on the second pick?



$$P(\text{red}) \cdot P(\text{green after red}) =$$

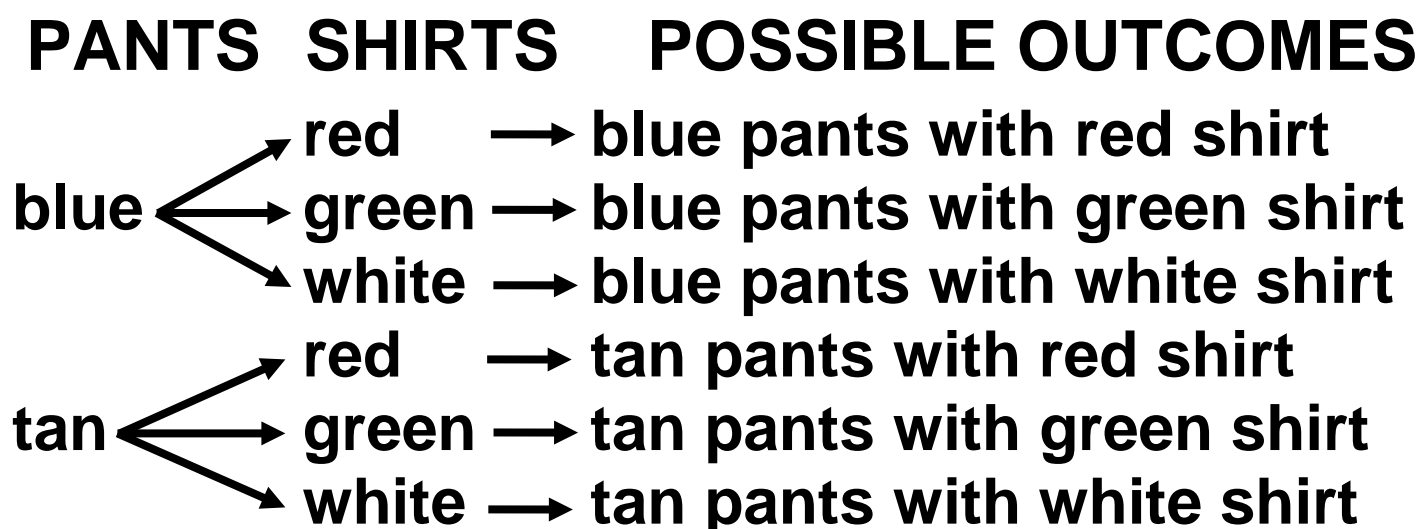
$$\frac{4}{12} \cdot \frac{2}{11} = \frac{8}{132} = \frac{2}{33}$$

Fundamental Counting Principle

If there are m ways for one event to occur and n ways for a second event to occur, then there are $\underline{m} \cdot \underline{n}$ ways for both events to occur.

Tree Diagram

Joe has two pairs of pants (blue and tan). He also has three shirts (red, green and white). List the possible outfits that Joe can make.



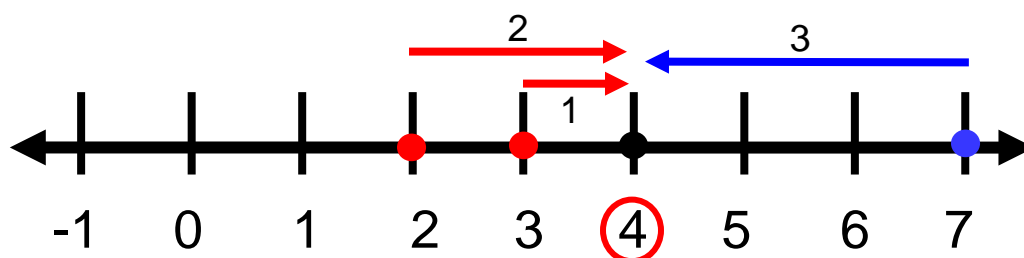
2 • 3 or 6 possible outcomes

Mean

a measure of central tendency

2, 3, 4, 7

Balance Point



Numerical Average

$$\frac{2 + 3 + 4 + 7}{4} = \frac{16}{4} = 4$$

Median

a measure of central tendency

6, 7, 8, 9, 9



8 = median

5, 6, 8, 9, 11, 12



8.5 = median

Mode

a measure of central tendency

Data Sets	Mode
2, 3, 3, 3, 5, 5, 9, 10	3
5.2, 5.4, 5.5, 5.6, 5.8, 5.9, 6.0	none
1, 1, 2, 5, 6, 7, 7, 9, 11, 12	1, 7



bimodal

Range

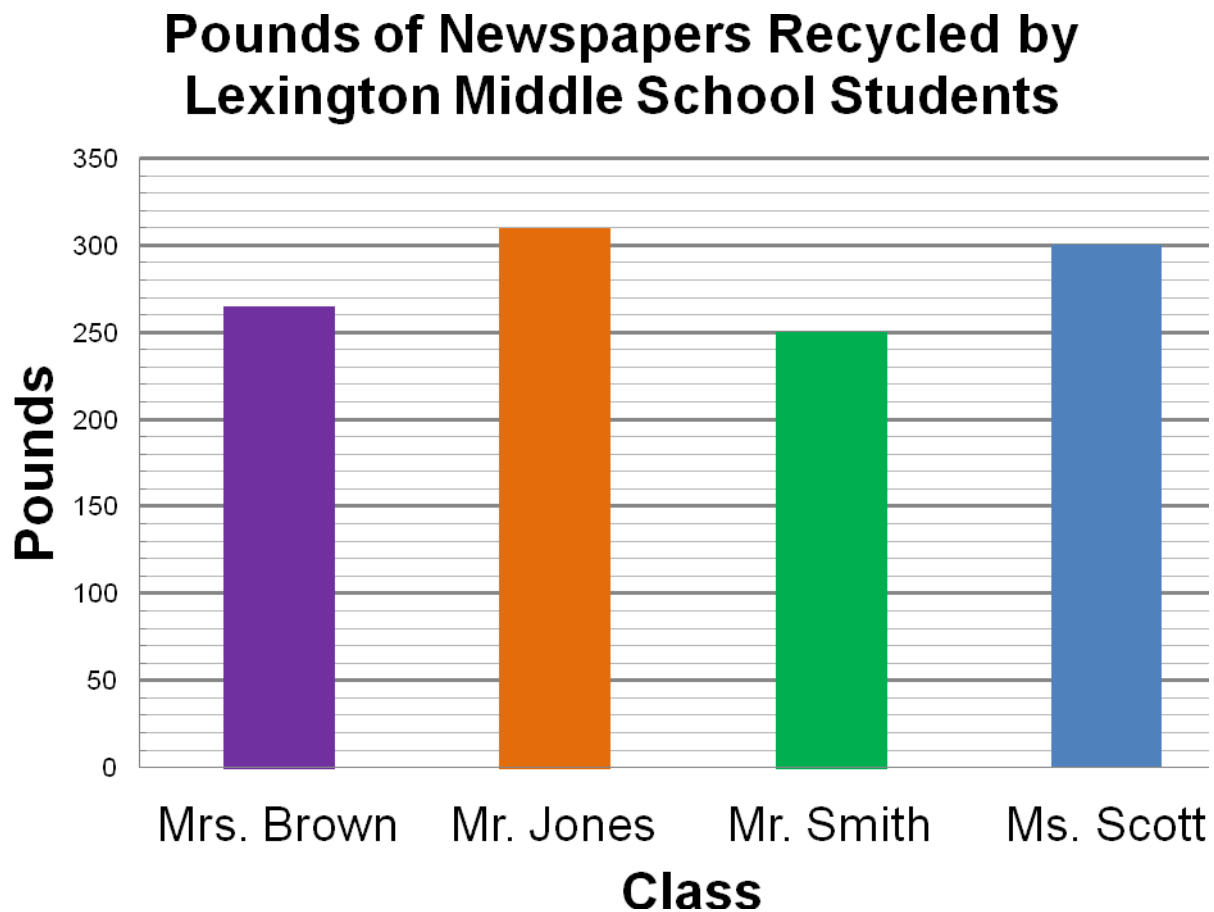
Data set

$2\frac{1}{2}$, 3, $3\frac{3}{4}$, $3\frac{7}{8}$, 5, $5\frac{1}{2}$, $9\frac{1}{6}$, $10\frac{4}{5}$, $15\frac{1}{2}$, 20

$$20 - 2\frac{1}{2} = 17\frac{1}{2}$$

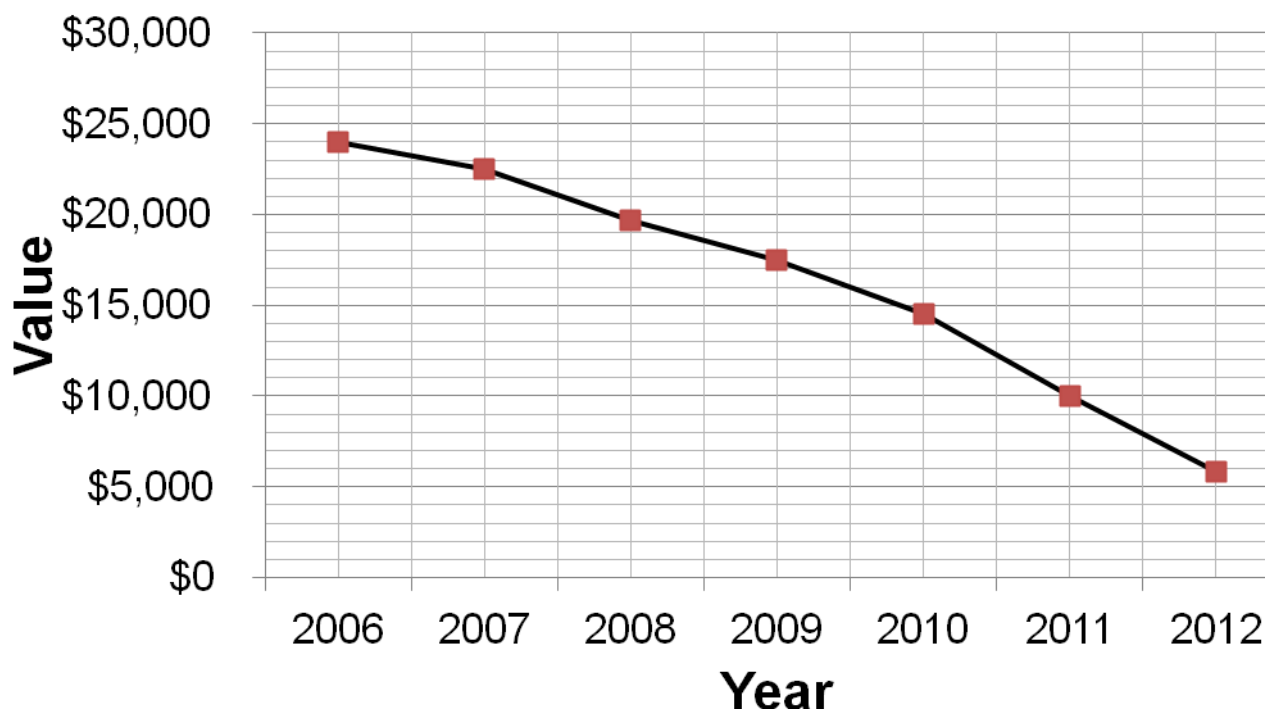
$$\text{Range} = 17\frac{1}{2}$$

Bar Graph



Line Graph

Value of Sarah's Car



Stem-and-Leaf Plot

Math Test Scores

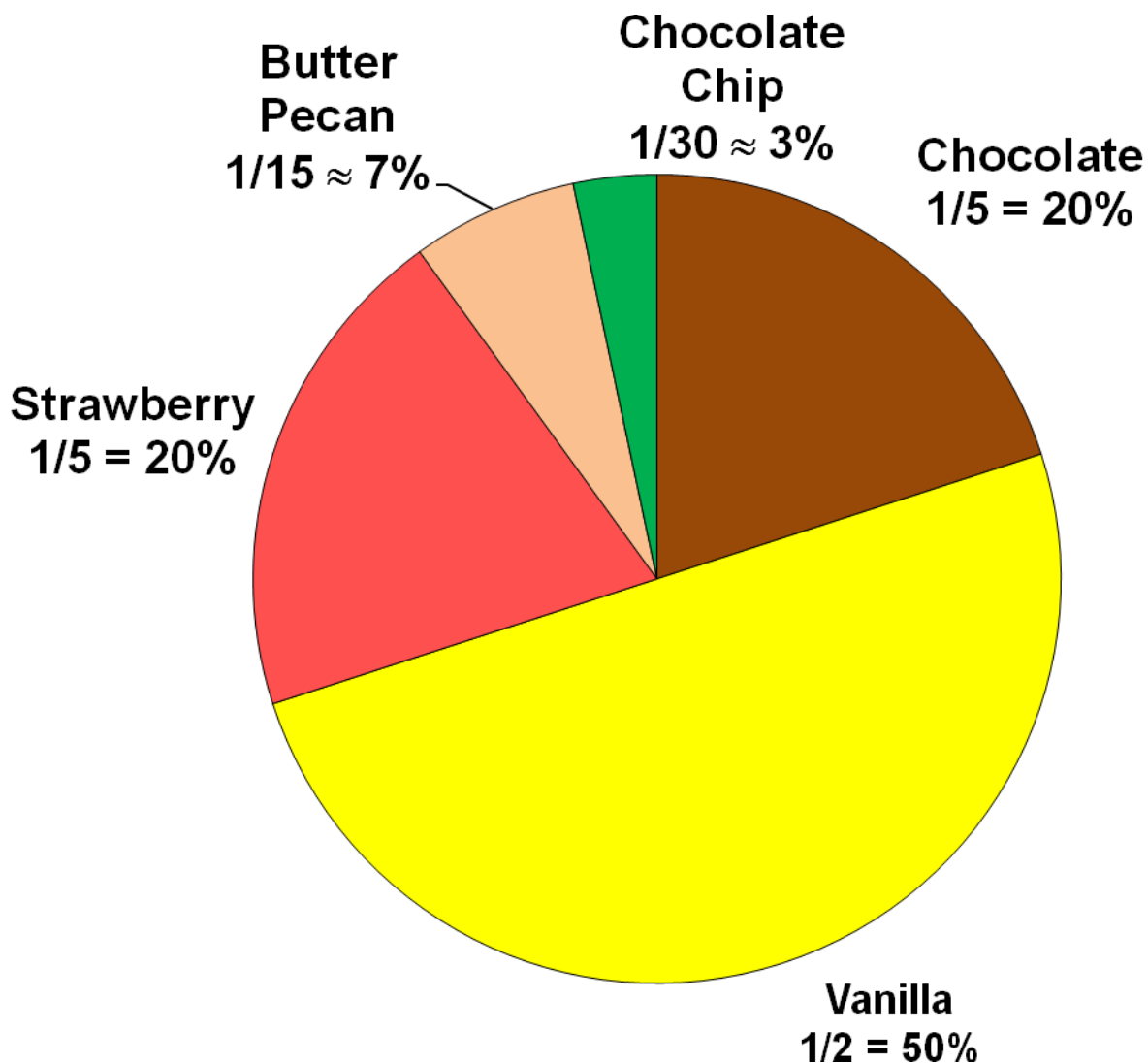
56, 65, 98, 82, 64, 71, 78, 86, 95, 91,
59, 70, 80, 92, 76, 82, 85, 91, 92, 73

STEM	LEAF
5	6 9
6	4 5
7	0 1 3 6 8
8	0 2 2 5 6
9	1 1 2 2 5 8

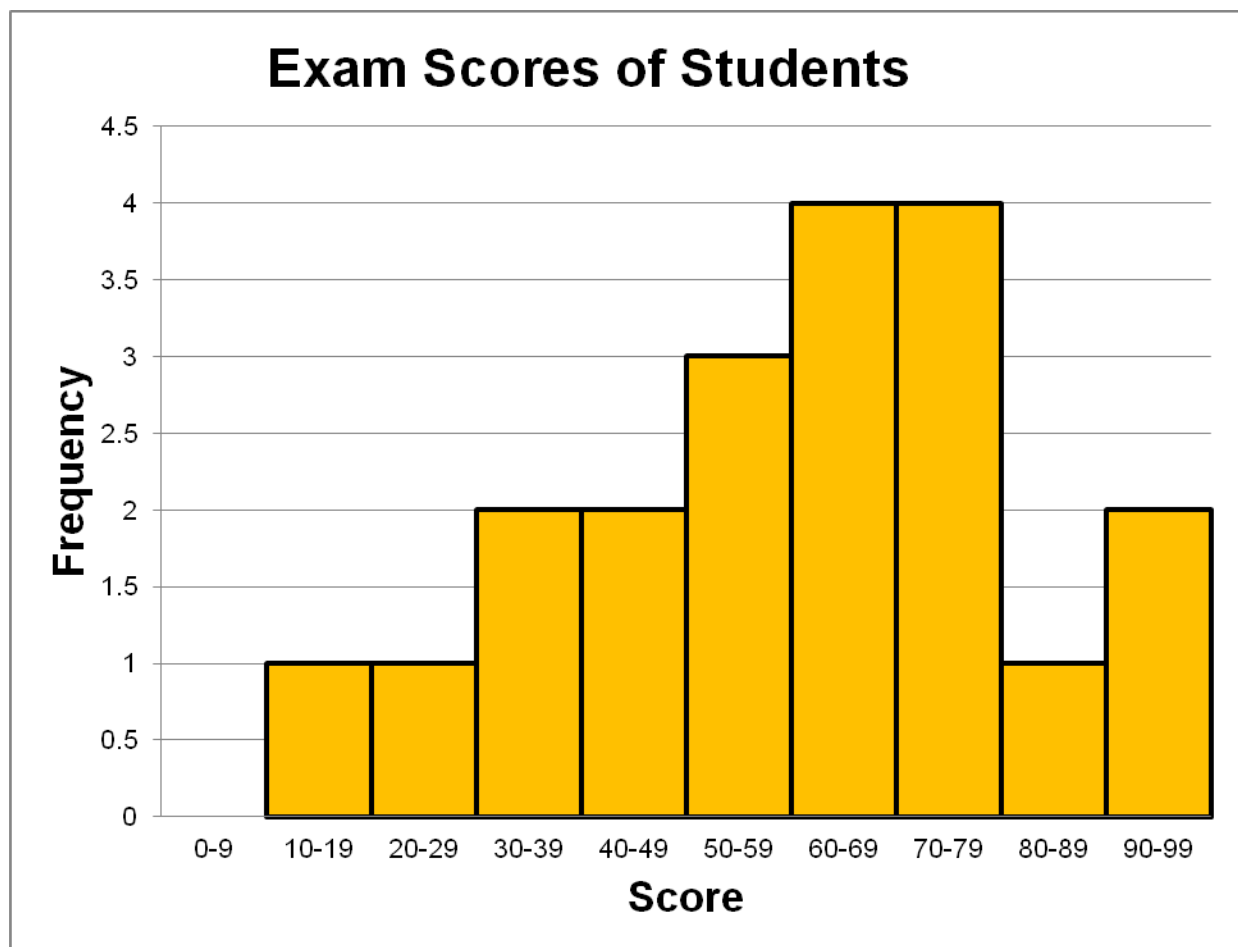
Key: 5|6 means 56

Circle Graph

Favorite Ice Cream

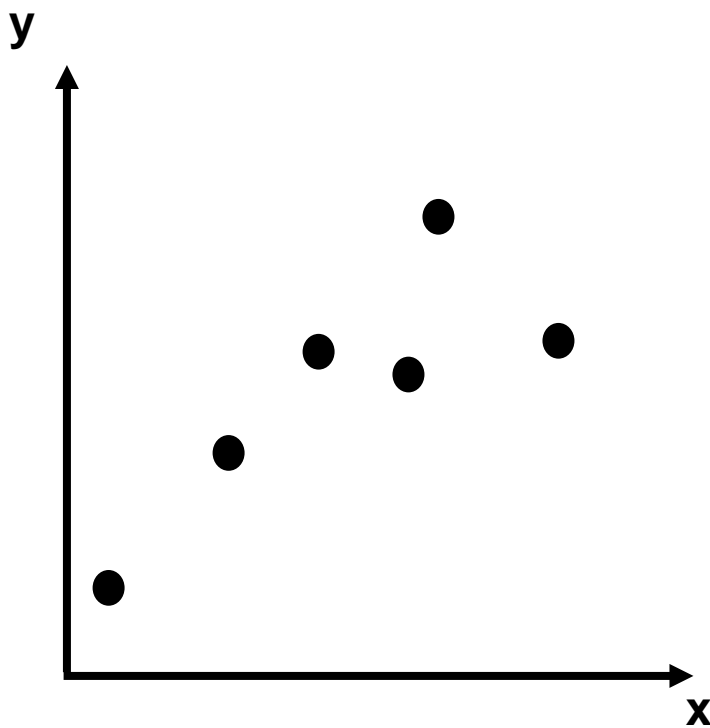


Histogram



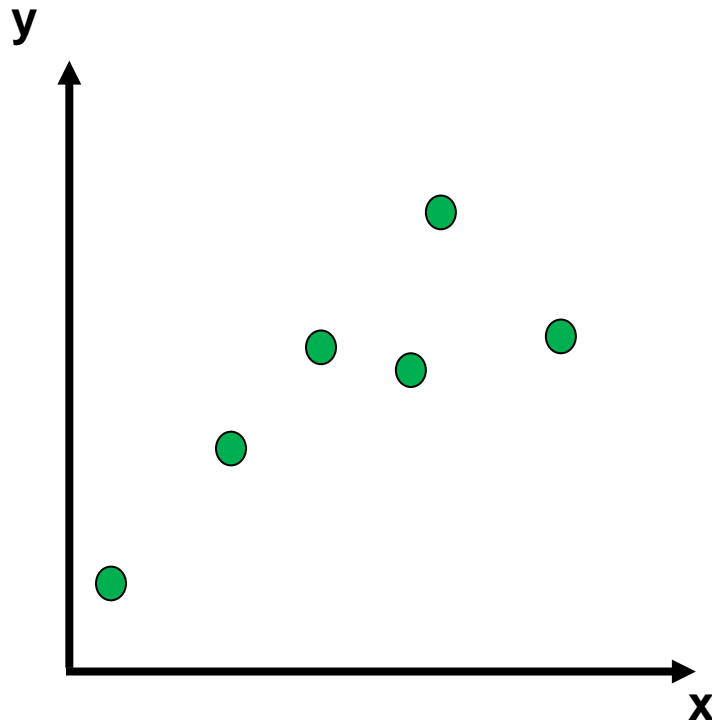
Scatterplot

illustrates the relationship between two sets of data.



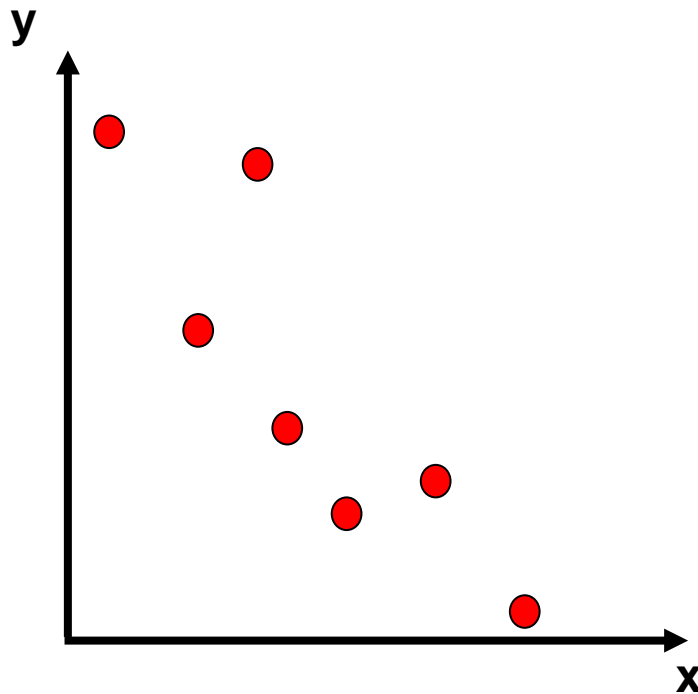
Positive Correlation

y-coordinates increase as
x-coordinates increase



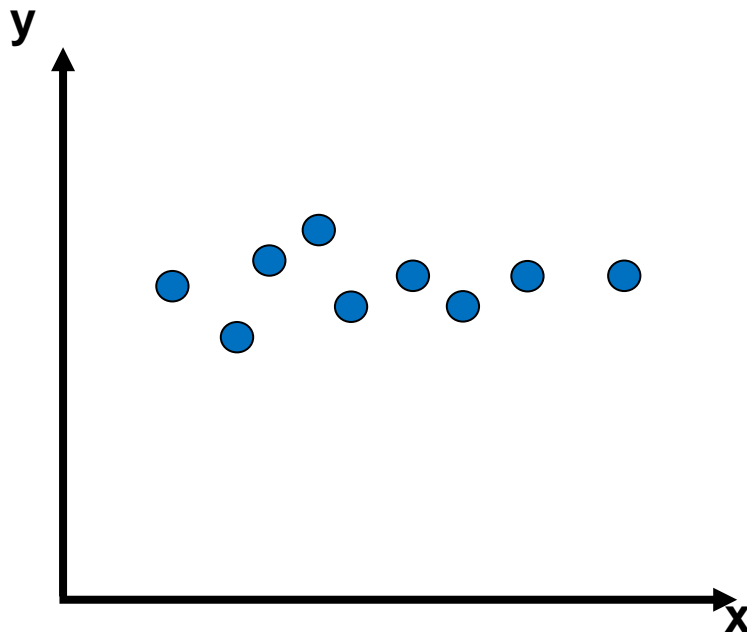
Negative Correlation

y-coordinates decrease as
x-coordinates increase



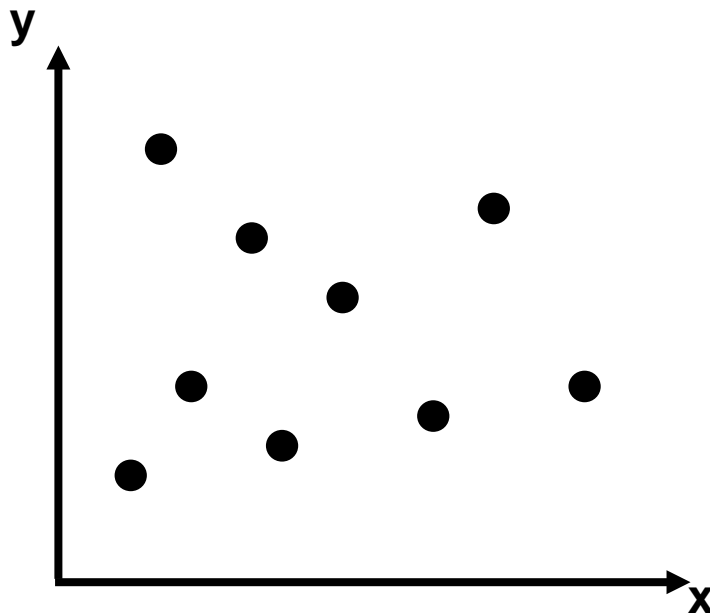
Constant Correlation

y-coordinates remain about
the same as x-coordinates
increase



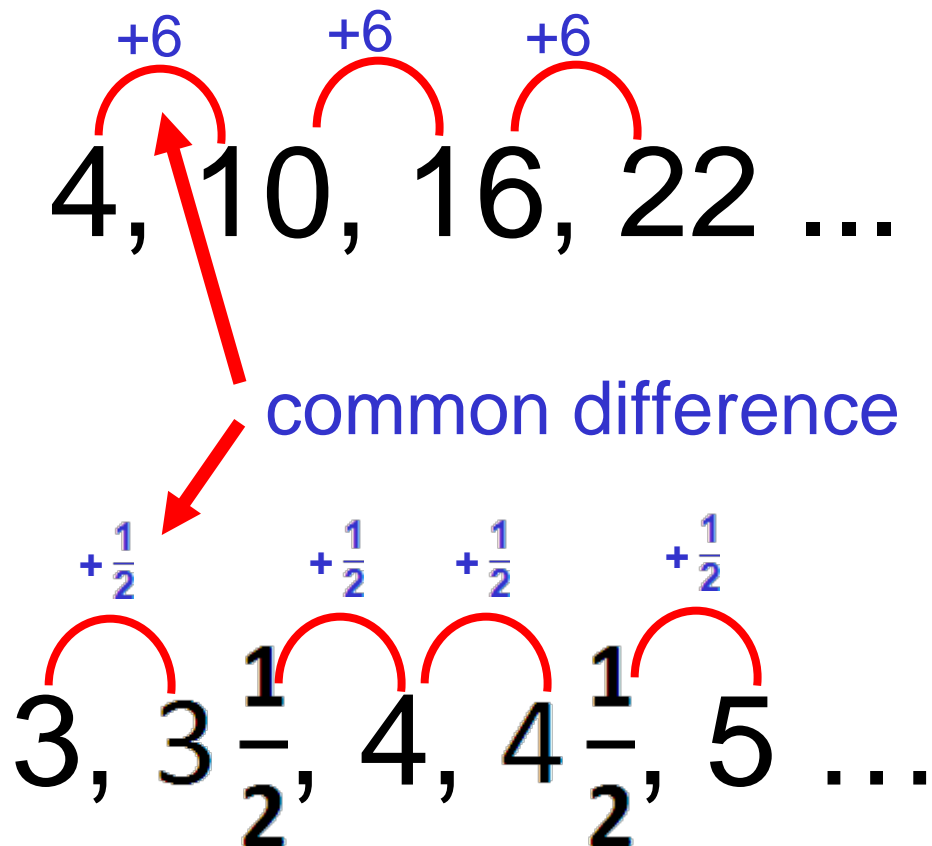
No Correlation

no pattern exists between the x- and y-coordinates



Arithmetic Sequences

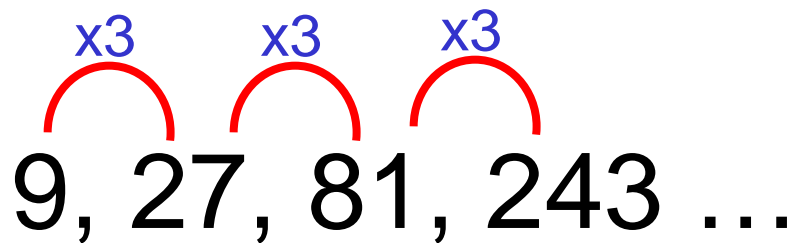
What is the next term?



Geometric Sequences

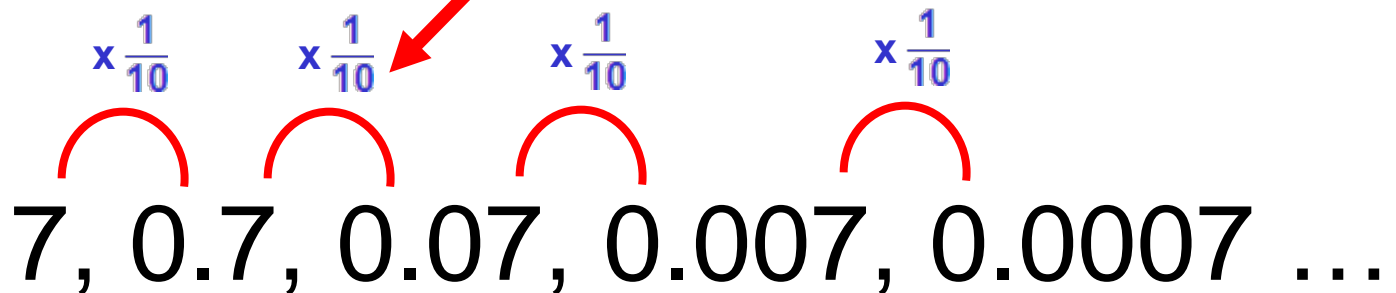
What is the next term?

$9, 27, 81, 243 \dots$



common ratio

$7, 0.7, 0.07, 0.007, 0.0007 \dots$



Additive Identity Property

$$0.3 + 0 = 0.3$$

$$0 + (-7) = -7$$

$$\frac{4}{7} = 0 + \frac{4}{7}$$

$$w + 0 = w$$

Additive Inverse Property

$$1.4 + (-1.4) = 0$$

$$(-9) + 9 = 0$$

$$0 = \frac{4}{7} + \left(-\frac{4}{7}\right)$$

$$x + (-x) = 0$$

Associative Property

Addition:

$$(4 + 2) + 8 = 4 + (2 + 8)$$

$$x + (3x + \frac{1}{2}) = (x + 3x) + \frac{1}{2}$$

Multiplication:

$$(3 \cdot 1.5) \cdot 6 = 3 \cdot (1.5 \cdot 6)$$

$$2(3x) = (2 \cdot 3)x$$

Commutative Property

Addition:

$$2.76 + 3 = 3 + 2.76$$

$$(a + 5) + 7 = (5 + a) + 7$$

Multiplication:

$$-8 \cdot \frac{2}{3} = \frac{2}{3} \cdot (-8)$$

$$y \cdot 9 = 9y$$

Multiplicative Identity Property

$$9 \cdot 1 = 9$$

$$1 \cdot (-10) = -10$$

$$\frac{3}{2} = \frac{3}{2} \cdot 1$$

Multiplicative Inverse Property

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

$$1 = \left(-\frac{1}{9}\right) \cdot -9$$

$$x \cdot \frac{1}{x} = 1 \quad (x \neq 0)$$

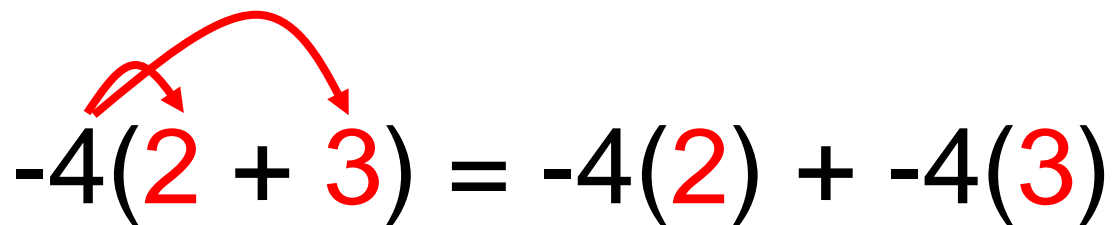
Multiplicative Property of Zero

$$0 = 8 \cdot 0$$

$$0(-13) = 0$$

$$\frac{5}{6}x \cdot 0 = 0$$

Distributive Property



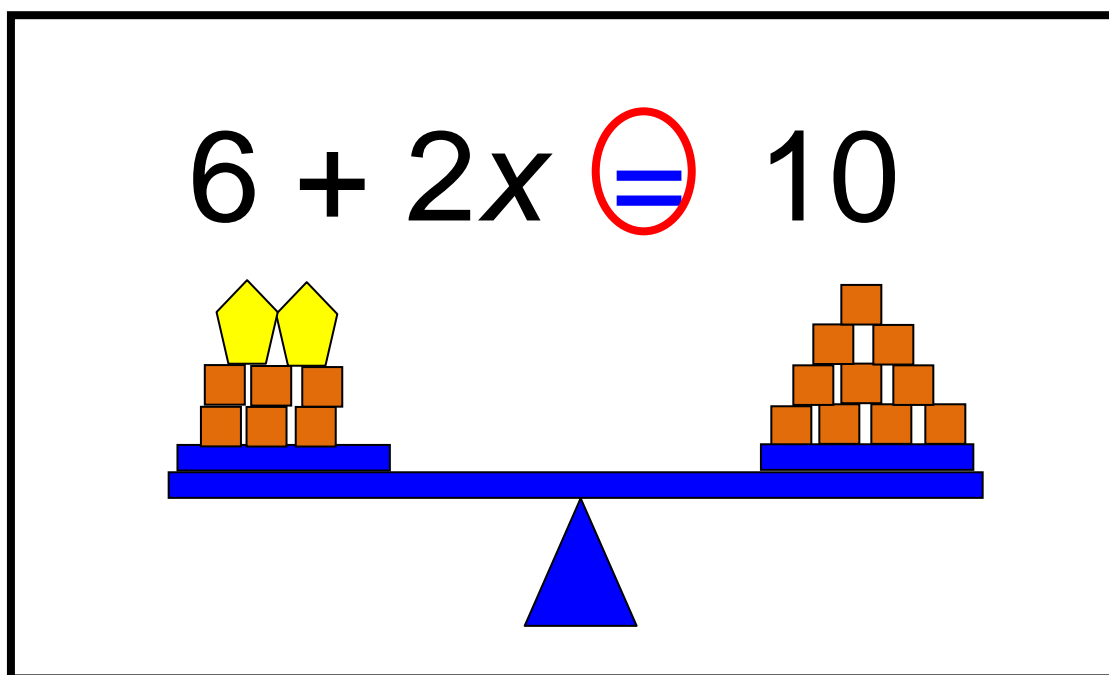
A diagram illustrating the distributive property. A red curved arrow starts from the coefficient -4 and points to the first term 2 inside the parentheses. A second red curved arrow starts from the same -4 and points to the second term 3 inside the parentheses. The equation is $-4(2 + 3) = -4(2) + -4(3)$, with the numbers 2 and 3 inside the parentheses, and the numbers 2 and 3 in the resulting terms, all highlighted in red.

$$-4(2 + 3) = -4(2) + -4(3)$$

$$5 \cdot (y - 7) = (5 \cdot y) - (5 \cdot 7)$$

$$(2 \cdot \frac{1}{3}) + (2 \cdot 5) = 2(\frac{1}{3} + 5)$$

Equation



A mathematical sentence stating that two expressions are equal.

$$2.76 + 3 = 3 + 2.76$$

$$3x = 6.9$$

Expression

$$x$$

$$-\sqrt{26}$$

$$2x + 3^4$$

$$3(y + 3.9) - \frac{8}{9}$$

Variable

$$2(\textcolor{red}{y} + 3)$$

$$3 + \textcolor{red}{x} = 2.08$$

$$\textcolor{red}{A} = \pi \textcolor{red}{r}^2$$

Coefficient

$$(-4) + 2x$$

$$-7y^2$$

$$\frac{2}{3}ab - \frac{1}{2}$$

Term

$$\underbrace{3x} + \underbrace{2y} - \underbrace{8}$$

3 terms

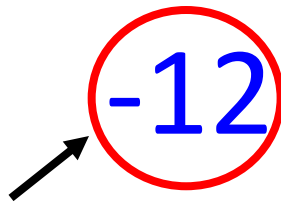
$$\underbrace{-5x^2} + \underbrace{(-2x)}$$


2 terms

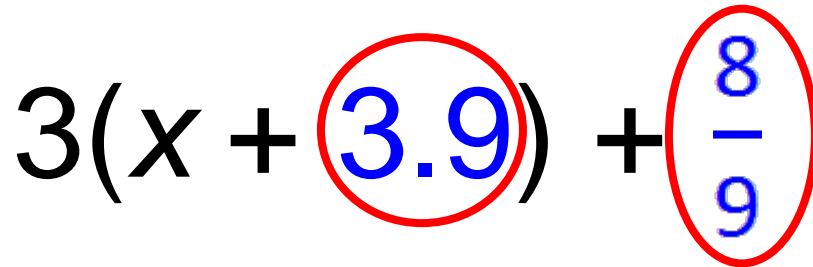
$$\underbrace{\frac{2}{3}ab}$$

1 term

Constant

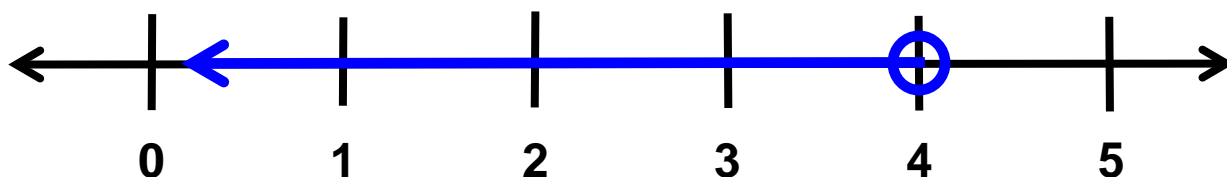
$$4x - 12$$


$$7 - 2y + x - 6x^2$$


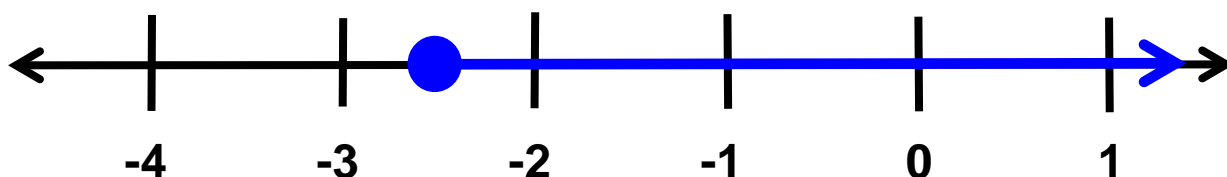
$$3(x + 3.9) + \frac{8}{9}$$


Inequality

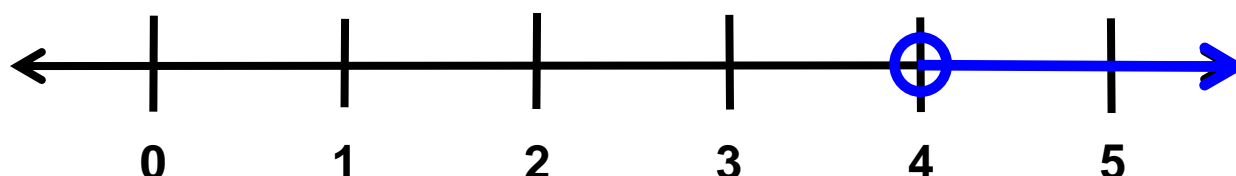
$$y < 4$$



$$3r \geq -7.5$$



$$-3(n - 4) < 0$$



Like Terms

$$\textcircled{4x} - 3y + \textcircled{6x} - 7$$

$$\textcircled{2y^2} - 3y + \textcircled{7y^2}$$

$$-5r^2 \textcircled{-6} + 2r + \textcircled{2}$$

Relations

$\{(2,3), (4,1), (2,5)\}$

x	y
2	2
-3	4
5	-1
0	4
1	-6

$\{(0,4), (0,3), (0,2), (0,1)\}$

Functions

$\{(2,4), (3,2), (0,2), (-1,2)\}$

x	y
3	2
2	4
0	2
-1	2

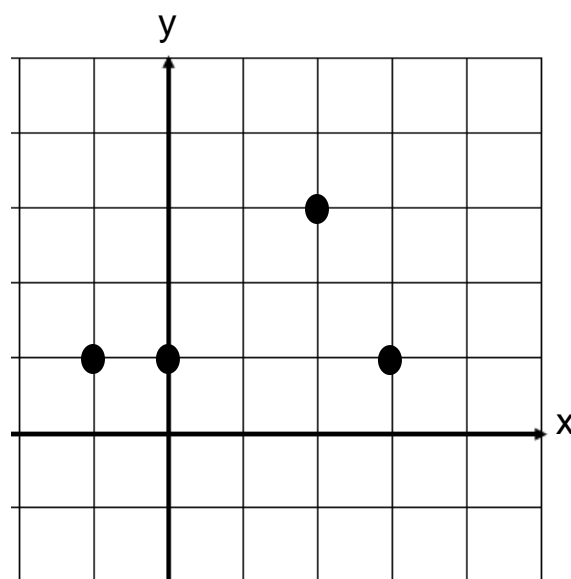


Table of Values

x	y
0	1
1	2
2	5
3	10
4	17

a	1	2	3	4
b	22,500	22,000	21,500	21,000

Domain

$\{(-2,0), (-1,1), (0,2), (1,3)\}$

x	y
-2	0
-1	1
0	2
1	3

$\{-2, -1, 0, 1\}$

Range

$\{(-2, 0), (-1, 1), (0, 2), (1, 3)\}$

x	y
-2	0
-1	1
0	2
1	3

$\{0, 1, 2, 3\}$

Dependent/ Independent Variable

Determine the **distance** a car will travel going 55 mph.

$$d = 55h$$

independent

h	d
0	0
1	55
2	110
3	165

dependent

Independent Variable

$$y = 2x + 7$$

x represents the independent variable (input values or domain)

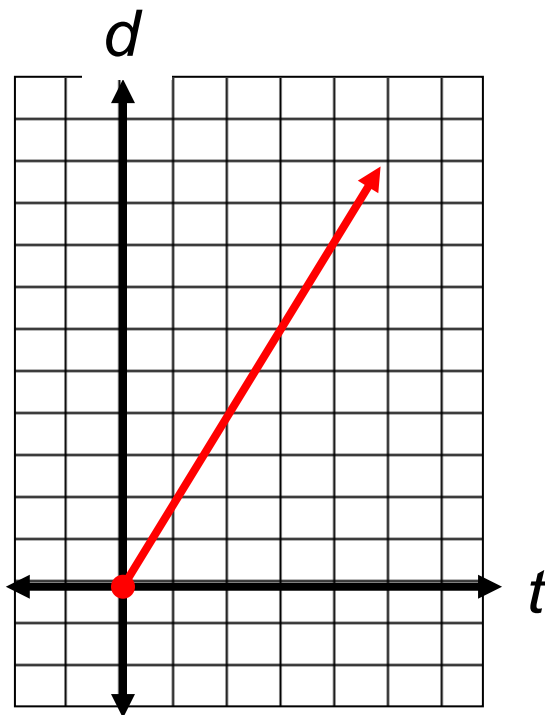
Dependent Variable

$$\textcircled{y} = 2x + 7$$

y represents the dependent variable (output values or range)

Connecting Representations

The total distance Sam walks depends on how long he walks. If he walks at 2.1 mph, show multiple representations of the relationship.



t	d
0	0
1	2.1
2	4.2
4	8.4

$$d = 2.1t$$

Multistep Equations

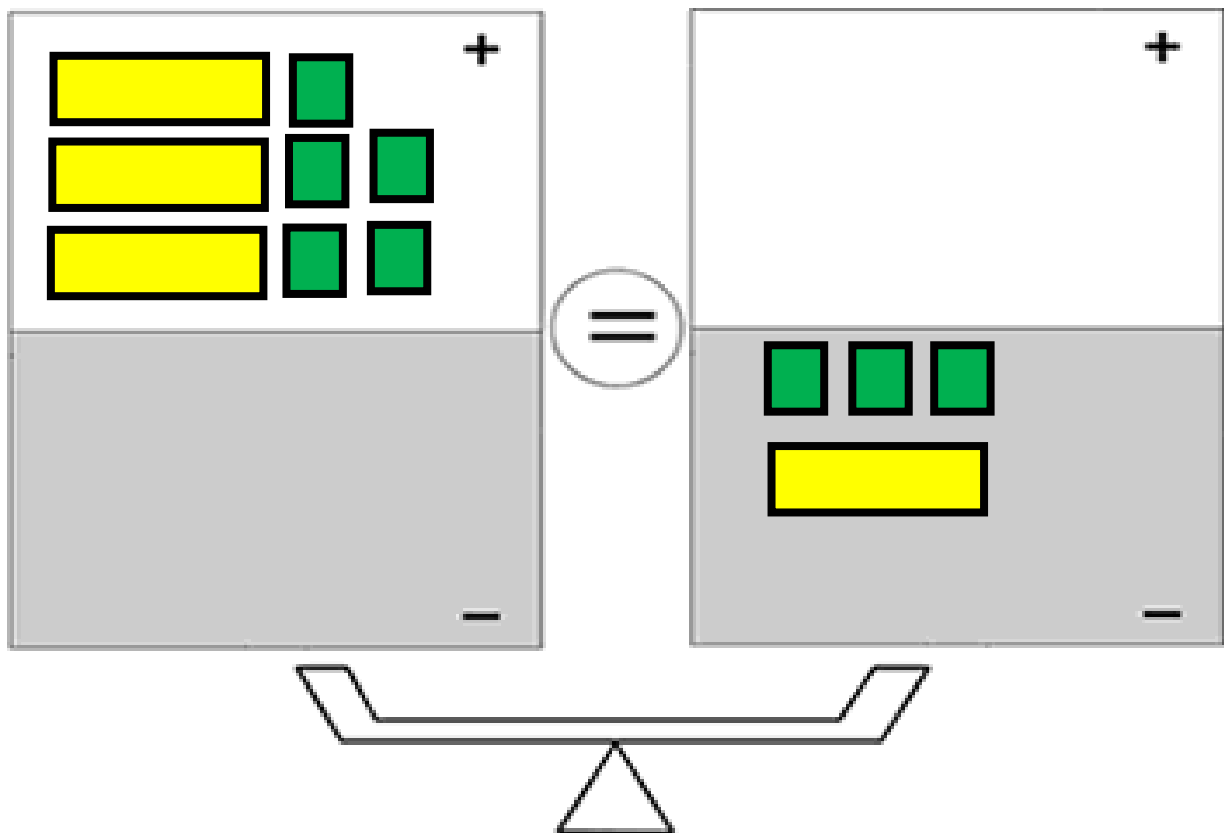
$$2x - 5.7 = -3.4x + 11.04$$

$$\frac{2}{3}(n + 9) = -\frac{5}{6}n$$

$$25 = \frac{6p - 5}{-4}$$

Multistep Equation

$$3x + 5 = -3 - x$$



Unit Rate as Slope

A student walks 2 miles per hour

$$\frac{2 \text{ miles}}{1 \text{ hour}}$$

