

7th grade unit 1 module 1 vocab

Difference

The amount that remains after one quantity is subtracted from another.

$$49.75 - 13.9 = 35.85$$

35.85 is the difference.

Additive inverse

A number that is the same distance from 0 on the number line, but in the opposite direction.

$$+3 + -3 = 0$$

Identity property of addition

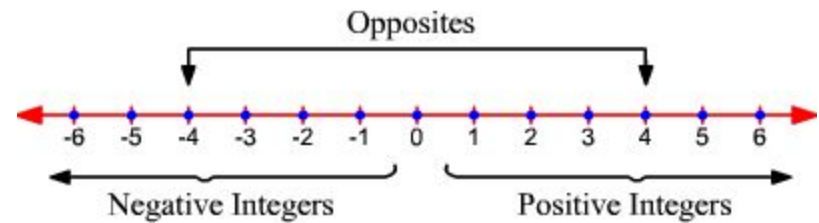
If you add zero to a number, the sum is the same as that number.

$$8 + 0$$

7th grade unit 1 module 1 vocab

Integers

The set of whole numbers and opposites.



7th grade unit 1 module 2 vocab

**Identity property of
multiplication**

**If you multiply a number by one, the
product is the same as the number.**

$$1 \times 3 = 3$$

7th grade unit 1 module 3 vocab

Complex fraction

A fraction in which the numerator, denominator, or both are also fractions.

$$\frac{\frac{3}{7}}{24}$$

Rational number

A number that can be expressed as a ratio of two integers.

(2, -3, $\frac{1}{4}$, 0.18...)

Terminating decimal

A decimal which has a finite number of digits.

0.25, 0.2, 0.125, 0.1 ...

7th grade unit 2 module 4 vocab

Proportion

An equation showing that two ratios are equivalent.

$$\frac{2}{4} = \frac{4}{8}$$

Proportional relationship

A proportional relationship is a relationship between two variable quantities x and y , where y is a constant multiple (k) of x .

$$y = kx$$

$$d = rt$$

Constant of proportionality

The constant multiplier by which one variable in a proportional relationship is related to the other variable.

UNIT RATE

7th grade unit 2 module 5 vocab

Percent

A special ratio that compares a number to 100 using the symbol %.

80%

Percent increase

Extent to which a variable gains value.
Percent increase = $\frac{\text{new amount} - \text{original amount}}{\text{Original amount}} \times 100$

Percent decrease

Extent to which a variable loses value.
Percent decrease = $\frac{\text{original amount} - \text{new amount}}{\text{Original amount}} \times 100$

7th grade unit 2 module 5 vocab

Simple interest

A quick method for calculating the interest charge on a loan.

$$I = prt$$

Interest = principal x rate x time

7th grade unit 3 module 6 & 7 vocab

Expression

A variable or combination of variables, numbers, and symbols that represents a mathematical relationship.

$$5x + 3$$

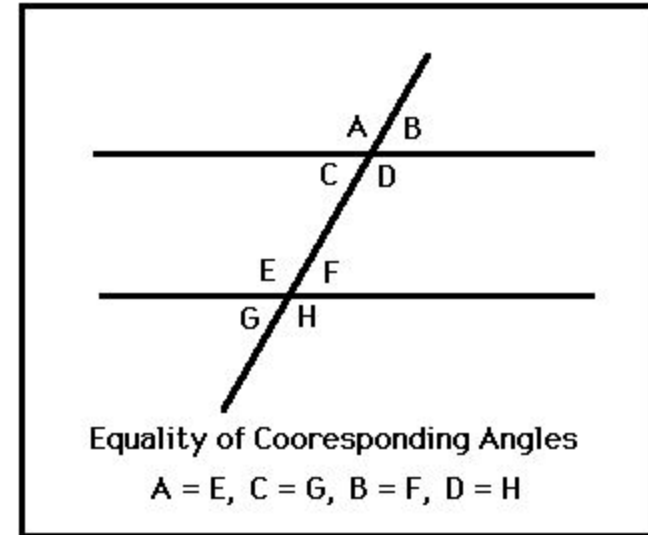
Inequality

A mathematical sentence that compares two unequal expressions using one of the symbols $<$, $>$, \leq , \geq , or \neq

7th grade unit 4 module 8 vocab

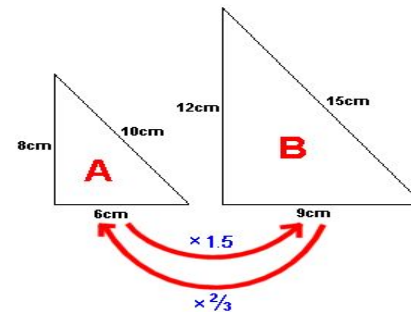
Corresponding angles

Angles in matching positions when a transversal crosses at least two lines.



Scale factor

Figures A and B are similar



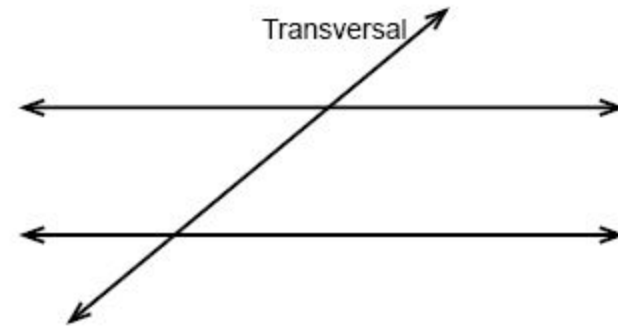
$$9 \div 6 = 1.5$$

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

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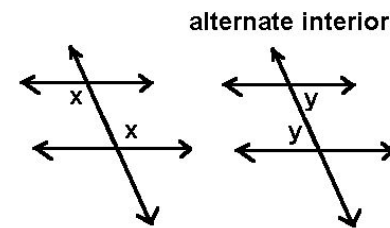
Transversal

A line that intersects at least two other lines.



Alternate interior angles

Angles inside the lines and on opposite sides of the transversal.

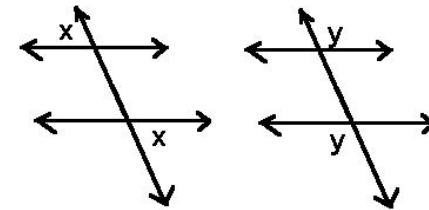


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Alternate exterior angles

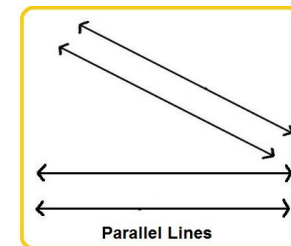
Angles outside the two lines and on opposite sides of the transversal.

alternate exterior



Parallel lines

Two lines on a plane that never meet. They are always the same distance apart.

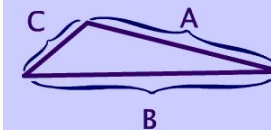


7th grade unit 4 module 8 vocab

Triangle inequality theorem

The theorem that asserts the sum of the lengths of any two sides of a triangle is greater than the length of the third side.

The Triangle Inequality Theorem



$$A + B > C$$

$$B + C > A$$

$$A + C > B$$

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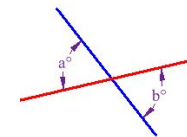
Circumference

The distance around a circle, which equals a little more than three times its diameter.

$$C = \pi d \text{ or } C = 2\pi r$$

Vertical angle

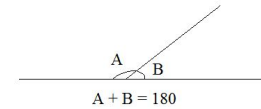
A pair of angles that share the same vertex and are bounded by the same pair of lines but are opposite each other.



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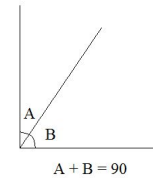
Supplementary angles

If the sum of the measures of two angles is **180 degrees**.



Complementary angles

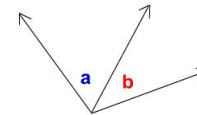
If the sum of the measures of two angles is **90 degrees**.



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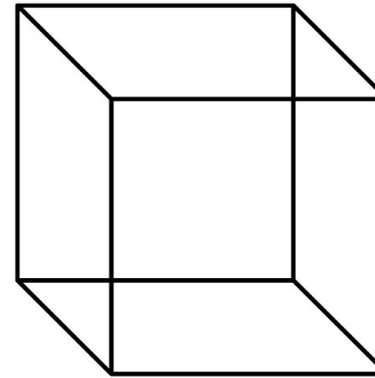
Adjacent angles

Two angles in a plane that have a common vertex and a common side.



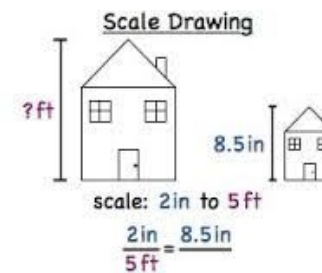
Cube

A three-dimensional shape with six square sides.



Scale drawing

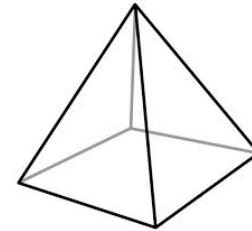
A drawing of an object or structure showing all parts in the same proportion of their true size.



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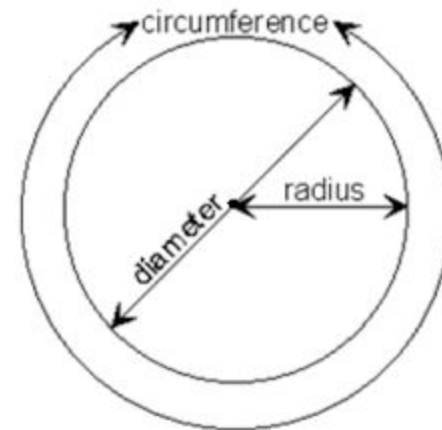
Pyramid

A polyhedron whose base is a polygon and whose other faces are triangles that share a common vertex.



Circle

A plane figure with all points the same distance from a fixed point called a center.



7th grade unit 5 module 10 vocab

Random sample

A selection that is chosen randomly.

Example: Drawing a number from a hat.

Population

The entire collection of items that is the focus of concern.

Examples: shoe sizes

Heights

Weights

Hat sizes

7th grade unit 6 module 12 vocab

Probability of dependent events

$$P(\text{red}) \times P(\text{green after red}) = \frac{6}{20} \times \frac{5}{19} = \frac{30}{380}$$

Dependent Events



Probability of independent events

9-6 Probability of Independent and Dependent Events

To find the probability that two independent events will happen, multiply the probabilities of the two events.

Probability of Two Independent Events

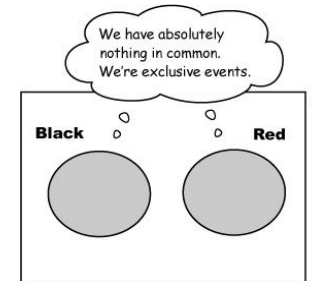
$$P(\text{A and B}) = P(\text{A}) \cdot P(\text{B})$$

↑ Probability of both events ↑ Probability of first event ↑ Probability of second event

7th grade unit 6 module 12 vocab

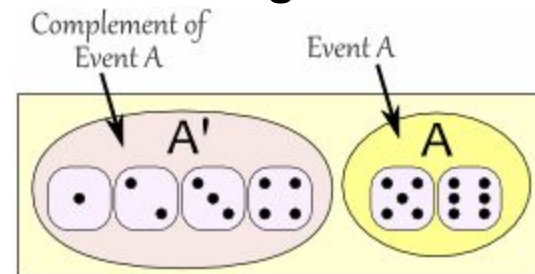
Mutually exclusive events

Events that preclude each other. Cannot occur at the same time.



Event

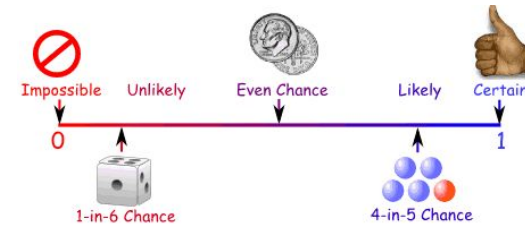
A set of outcomes to which a probability is assigned.



7th grade unit 6 module 12 vocab

Unlikely event

An event that will probably not happen. An outcome with a probability between 0 and 0.5



Compound event

Two or more independent events considered together.

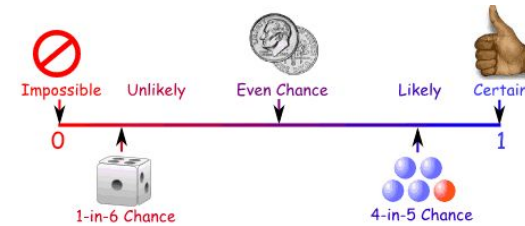
Probability of Compound Events

- A compound event consists of two or more simple events.
- Examples:
 - rolling a die and tossing a penny
 - spinning a spinner and drawing a card
 - tossing two dice
 - tossing two coins

7th grade unit 6 module 12 vocab

Likely event

An event that is most likely to happen.



Probability

The chance that a particular outcome will occur, measured as a ratio of the total possible outcomes.

$$\text{probability} = \frac{\text{event/s}}{\text{number of outcomes}}$$

wikiHow

Simulation

Carrying out a simple experiment to collect data.
Examples: rolling dice, flipping a coin

