1. **absolute value :**

The distance from a point on the number line to zero
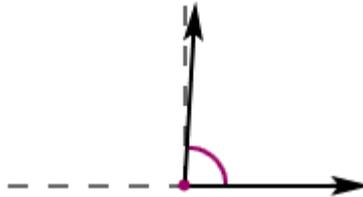
Example:

4 units from 0   4 units from 0

$$-10 \quad -8 \quad -6 \quad -4 \quad -2 \quad 0 \quad +2 \quad +4 \quad +6 \quad +8 \quad +10$$
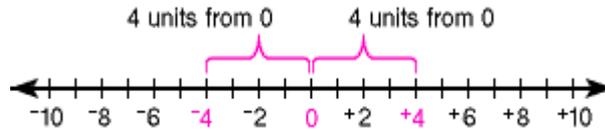
2. **acute angle :**

An angle whose measure is greater than 0° and less than 90°

Example:

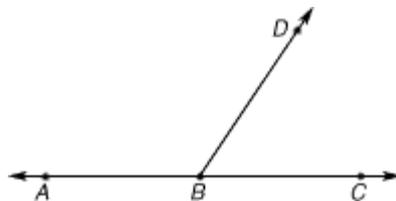3. **acute triangle :**

A triangle in which all three angles are acute

Examples:

70°

60°   50°

60°

60°   60°
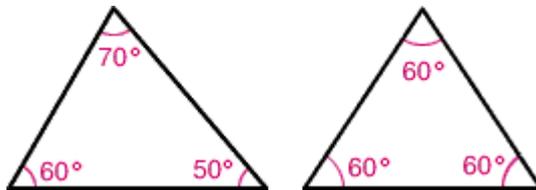
4. **adjacent angles :**

Angles that share a common side, have the same vertex , and do not overlap

Example:

D

A   B   C

∠*ABD* is adjacent to ∠*DBC*.

5. **algebraic expression :**

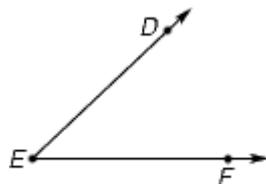An expression that is written using one or more variables

Examples:

3x   x – 4   2a + 5   a + b

6. **angle :**

A geometric figure formed by two rays that have a common endpoint

Example:

D

E

F

∠*DEF*, ∠*FED*, or ∠*E*

7. **associative property :**

Addends can be grouped differently; the sum is always the same. Factors can be grouped differently; the product is always the same.
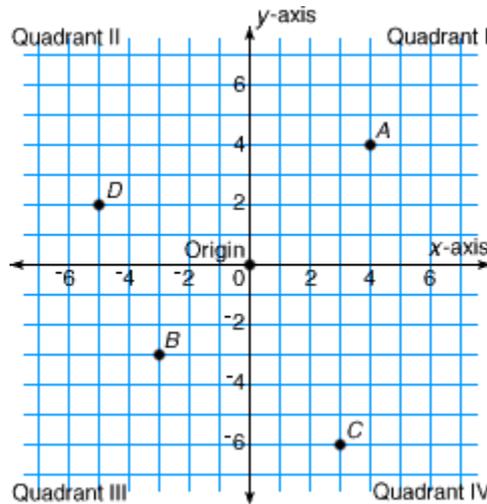
Examples:

(8 + 7) + 4 = 8 + (7 + 4)

$$(5 \times 2) \times 6 = 5 \times (2 \times 6)$$

8. axes :

The horizontal line (x-axis) and vertical line (y-axis) on the coordinate plane
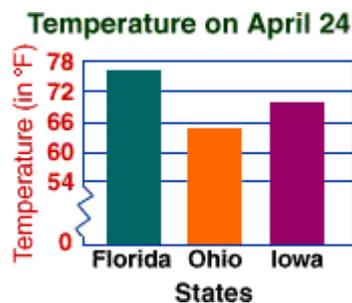
Example:

9. bar graph :

A graph that uses separate bars (rectangles) of different heights (lengths) to show and compare data

Example:

10. base :

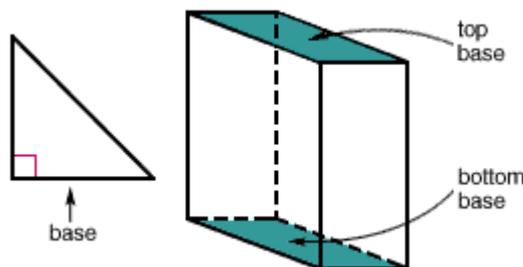A number used as a repeated factor

Example:

$$8^3 = 8 \times 8 \times 8$$

The base is 8. It is used as a factor three times.

A side of a polygon or a face of a solid figure by which the figure is measured or named
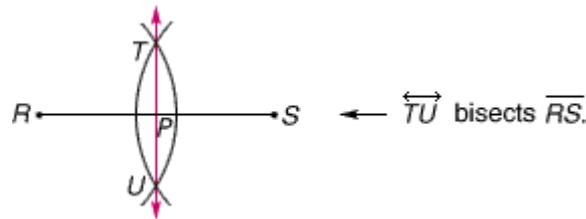
Examples:

11. biased sample :

A sample that is not representative of the population

12. bisect :

To divide into two equal parts

Example:

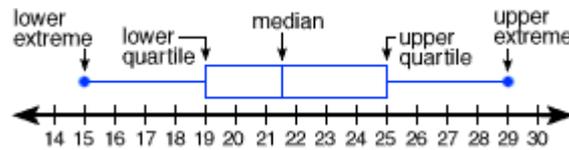$\overleftrightarrow{TU}$ bisects $\overline{RS}$.

13.   box-and-whisker graph :

A graph that shows how far apart and how evenly data are distributed
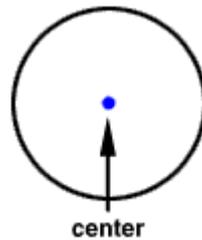
Example:

14.   circle :

The set of points in a plane that are the same distance from a given point called the center of the circle
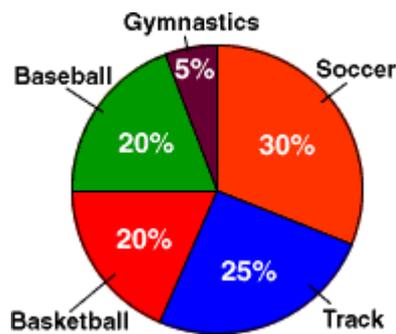
Example:

15.   circle graph :

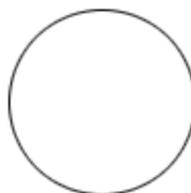A graph using a circle that is divided into pie-shaped sections showing percents or parts of the whole

Example:

16.   circumference :
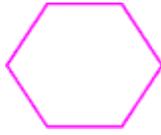
The distance around a circle

Example:

17.   closed figure :

A figure that begins and ends at the same point

Example:

18. clustering :

A method used in estimation when all addends are about the same

Example:

1,802 2,182 +1,999	*The three addends are close to 2,000*
3 X 2,000 = 6,000	*Multiply*

So, the sum is about 6,000.

19. commutative property :

The property which states that numbers can be added in any order or can be multiplied in any order without changing the sum or the product

Examples:

9 + 4 = 4 + 9

6 X 3 = 3 X 6

20. compatible numbers :

Pairs of numbers that are easy to compute mentally

Example:

÷ 36	
÷ 40	*4 is compatible with 16.*
÷ 40 = 40	*Divide.*

So, the quotient of 1,545 ÷ 36 is about 40.

21. compensation :

An estimation strategy in which you change one addend to a multiple of ten and then adjust the other addend to keep the balance

Example:

16 + 9

(16 - 1) + (9 + 1)

15 + 10 = 25

22. complement :

In probability, the complement of an event is all outcomes different from the favorable outcome. The sum of the probability of an event and its complement is 1.

Example:

The number cube is labeled 1-6.

$$\text{Event: rolling a 2} \longrightarrow P(2) = \tfrac{1}{6}$$
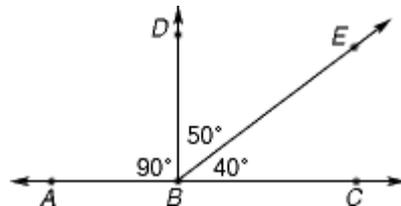
$$\text{Complement: not rolling a 2} \longrightarrow P(\text{not } 2) = \tfrac{5}{6}$$

$$P(2) + P(\text{not } 2) = \tfrac{1}{6} + \tfrac{5}{6} = 1$$

23.   complementary angles :

Two angles whose measures have a sum of 90°

Example:

∠DBE and ∠EBC are complementary

24.   composite number :

A whole number greater than 1 with more than two whole-number factors

Example:

6 = 1 X 6

6 = 2 X 3

factors of 6: 1, 2, 3, and 6

25. compound event :

An event that includes more than one activity is a compound event.
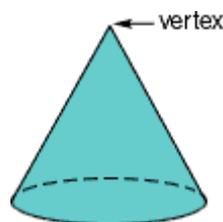
Example:

Tossing the coin and rolling the number cube are compound events.

26. cone :

A solid figure with a circular base and one vertex

Example:

27. congruent figures :

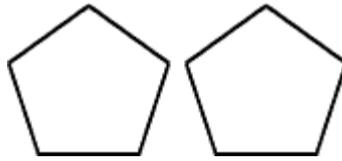Figures that have the same size and shape

Example:

The two triangles are congruent.

28. congruent polygons :

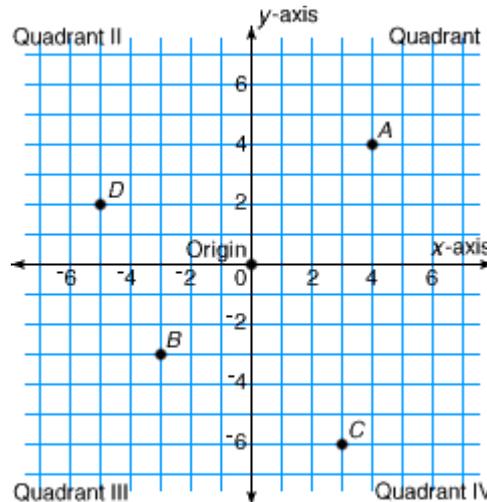Polygons that have all sides and all angles congruent

29. coordinate plane :

A plane formed by a horizontal line (*x*-axis) that intersects a vertical line (*y*-axis) at a point called the origin

Example:

30. cross products :

Two equal products obtained by multiplying the second term of each ratio by the first term of the other ratio in a proportion

Example:

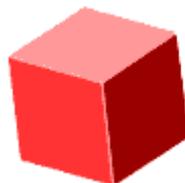first term ⟶ $\frac{2}{3}$ ⤢ = ⤢ $\frac{8}{12}$
second term ⟶

$3 \times 8 \stackrel{?}{=} 12 \times 2$ ← cross products

$24 = 24$

The ratios form a proportion.

31. cube :

A rectangular solid figure with six congruent faces

Example:

32. customary measurement system :

A measurement system that measures length in inches, feet, yards, and miles; capacity in cups, pints, quarts, and gallons; weight in ounces, pounds, and tons; and temperature in degrees Fahrenheit

33. cylinder :

A solid figure with two parallel bases that are congruent circles

curved lateral surface — flat circular bases
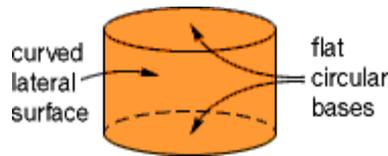
34. decimal :

A number that uses place value and a decimal point to show tenths, hundredths, thousandths, and so on
Example:
3.47

35. decimal system :

A numeration system based on grouping by tens
Example:

	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths	Ten Thousandths
1,623,051→	1	6	2	3	0	5	1				
0.0531→							0	0	5	3	1
32.4→						3	2	4			

36. degree Celsius :

A metric unit for measuring temperature

37. degree Fahrenheit :

A customary unit for measuring temperature

38. denominator :

The bottom part of a fraction
Example:

$\frac{3}{4}$ ←denominator

39. dependent events :

Events for which the outcome of one event is affected by the outcome of the other event
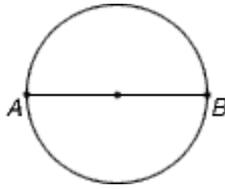*Example*:

Drawing a card and not replacing it, and then drawing a second card are dependent events.

40. diameter :

A line segment through the center of a circle, with endpoints on the circle
Example:

$\overline{AB}$ is a diameter of the circle.

41. discount :

The amount by which the original price is reduced

Example:

42. distributive property :

Multiplying the sum by a number is the same as multiplying each addend by the number and then adding the products

Example:

4 X (3 + 5) = 32

(4 X 3) + (4 X 5) = 32

43. dividend :

The number that is being divided in a division problem

Example:

The dividend is 35.

44. divisible :

A number is divisible by another number if the quotient is a whole number and the remainder is zero.

Example:

18 is divisible by 3.

45. divisor :

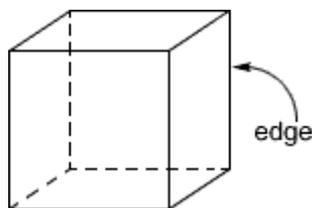The number by which a dividend is divided in a division problem

Example:

The divisor is 5.

46. edge :

The line segment where two faces of a solid figure meet

Example:

edge

47. equation :

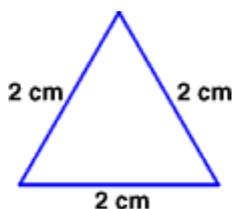An algebraic or numerical sentence that shows two quantities are equal

Examples:

$x + 3 = 4$

$7 - 2 = 5$

48. equilateral triangle :

A triangle with three congruent sides

Example:

2 cm   2 cm

2 cm

49. equivalent decimals :

Decimals that name the same number or amount

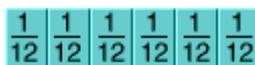*Example*:

$0.5 = 0.50 = 0.500$

50. equivalent fractions :

Fractions that name the same amount or part

Example:

$\frac{3}{6} = \frac{6}{12}$

51. equivalent ratios :

Ratios that make the same comparisons

Examples:

$\frac{5}{9} = \frac{10}{18}$ $5:9 = 10:18$

52. evaluate :

In a numerical expression, perform the operations and write the expression as one number. In an algebraic expression, replace the variable with a number and perform the operation in the expression.

Examples:

5^2 X (5 - 2)	*Operate inside parentheses.*
25 X 3	*Clear exponent.*
75	*Multiply.*

$x + 7$, for $x = 12$	.
$x + 7$	.

| | 12 + 7 | *Replace x with 12.* |
| | 19 | *Perform the operations.* |

53. experimental probability :

The ratio of the number of times the event occurs to the total number of trials or times the activity is performed

$$\text{experimental probability} = \frac{\text{number of times success occurs}}{\text{total number of trials}}$$

54. exponent :

The number that tells how many times a base is to be used as a factor

Example:

$$2^3 = 2 \text{ X } 2 \text{ X } 2 = 8$$

The exponent is 3, indicating that 2 is used as a factor three times.

55. expression :

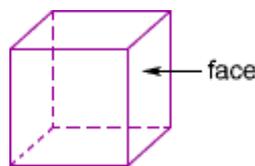A mathematical phrase that combines operations, numerals, and/or variables to name a number

Examples:

$$35 - 15.5 \qquad 3^2 \text{ X } a$$

56. face :

One of the polygons of a solid figure

Example:

The cube has 6 faces.

57. factor :

A number that is multiplied by another number to find a product

Example:

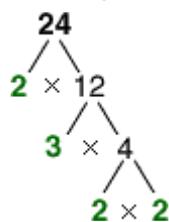The factors are 6 and 2.

58. factor tree :

A diagram that shows the prime factors of a number

Example:

The prime factors of 24 is 2 X 2 X 2 X 3.

59. Fibonacci Sequence :

The infinite sequence of numbers formed by adding two previous numbers to get the next number
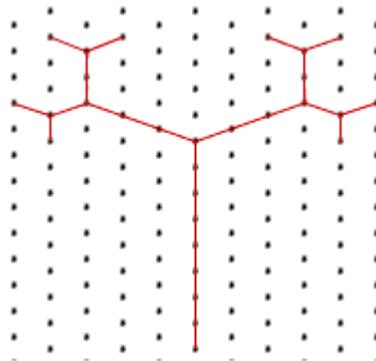
Example:

1, 1, 2, 3, 5, 8, 13, 21, . . .

60. fractal-like :

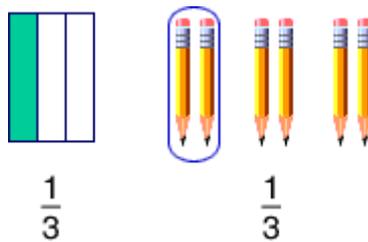A mathematical figure that appears to have self-similarity

Example:

61. fraction :

A number that names part of a whole or part of a group

Example:

$$\frac{1}{3}$$ $$\frac{1}{3}$$

62. frequency table :

A table that organizes the total for each category or group

Example:

FREQUENCY TABLE		
Day	Number of Students (Frequency)	Total Number of Students (Cumulative Frequency)
Monday	15	15
Tuesday	13	28
Wednesday	5	33
Thursday	9	42
Friday	17	59

15 + 13 = 28
28 + 5 = 33
33 + 9 = 42
42 + 17 = 59

63. golden ratio :

A ratio equivalent to the value of about 1.6

Examples:

$$\frac{24}{15} = 1.6$$

$$\frac{15}{9} = 1.6667 \approx 1.6$$

64. golden rectangle :

A rectangle with a length-to-width ratio of about 1.6 to 1

Example:

1 cm

1.6 cm

65. greater than (>) :

More than in size, quantity, or amount; the symbol > stands for *is greater than*.

Example:

Read 7 > 5 as seven is greater than five.

66. greatest common factor (GCF) :

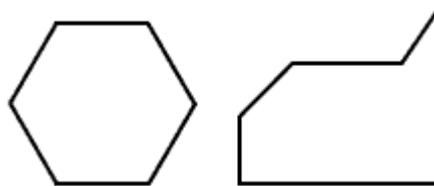The largest number that is a factor of two or more numbers

Example:

6 is the GCF of 18 and 30.

67. hexagon :
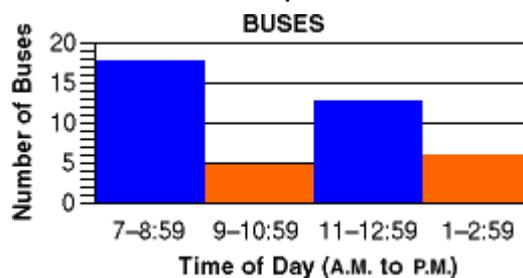
A six-sided polygon

Examples:

68. histogram :

A bar graph that shows the number of times data occur within certain ranges or intervals

Example:

69. identity property of one :

The property which states that the product of 1 and any factor is the factor

Examples:

15 X 1 = 15

1 X *a* = *a*

70. identity property of zero :

The property which states that the sum of any number and zero is that number

Examples:

15 + 0 = 15

0 + *a* = *a*

71. independent events :

Events for which the outcome of one event is not affected by the outcome of another event
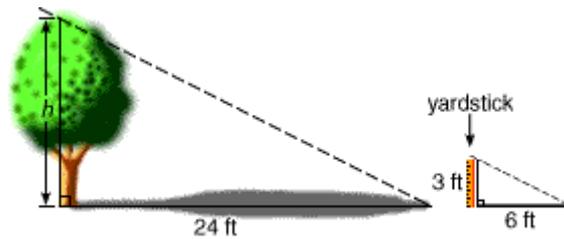
Example:

Tossing the coin and rolling the number cube are independent events.

72. indirect measurement :

The technique of using similar figures and proportions to find a measure

Example:

$$\frac{3}{h} = \frac{6}{24} \quad \leftarrow \text{small triangle} \atop \leftarrow \text{large triangle}$$ *Write a proportion.*

$6 \times h = 3 \times 24$ *Find the cross products.*

$6h = 72$

$\frac{6h}{6} = \frac{72}{6}$ *Solve the equation.*

$h = 12$

So, the tree is 12 ft tall.

73. inequality :

A mathematical sentence containing <, >, <, >, or ≠ to show that two expressions do not represent the same quantity
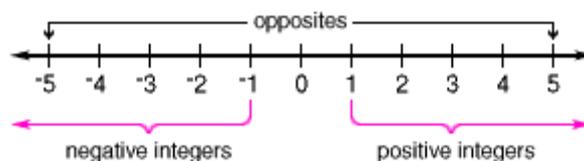
Examples:

$2 \times 3 < 8$ $6 + 5 > 9$

74. integers :

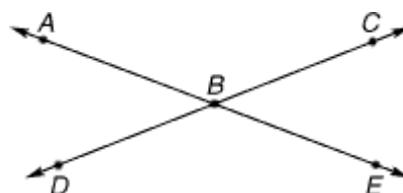The set of whole numbers and their opposites

Example:

75. intersecting lines :

Lines that cross at exactly one point

Example:

Line AE intersects line CD at point B.

76. interval :

A set of numbers that includes the endpoints and the numbers between

Example:

The first interval in the table is the ages 7, 8, 9, and 10.

| STUDENTS WHO READ GARFIELD			
Age Group	Tally	Frequency	Cumulative Frequency
7-10	JHT II	7	7
11-14	JHT II	7	14
15-18	III	3	17
19-22	III	3	20

77. inverse operations :

Opposite operations that undo each other; addition and subtraction are inverse operations; multiplication and division are inverse operations.

78. isosceles triangle :

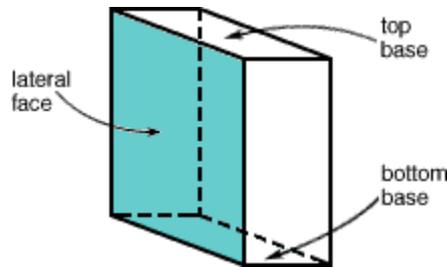A triangle with two congruent sides and two congruent angles

Example:
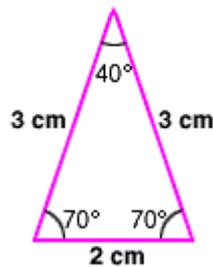
79. lateral face :

In a prism or a pyramid, a face that is not a base

Example:

Rectangular Prism

80. least common denominator (LCD) :

The smallest number, other than zero, that is a multiple of two or more denominators

Example:

$$\frac{1}{4} = \frac{3}{12}$$

$$\frac{5}{6} = \frac{10}{12}$$

LCD for $\frac{1}{4}$ and $\frac{5}{6}$

81. least common multiple (LCM) :

The smallest number, other than zero, that is a multiple of two or more given numbers

Example:

The LCM of 6 and 9 is 18.

82. less than (<) :

Smaller in size, quantity, or amount; the symbol < stands for *is less than*.
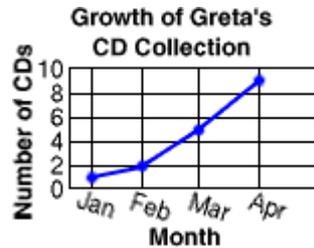
Example:

Read 5 < 7 as five is less than seven.

83. line graph :

A graph in which line segments are used to show changes over time
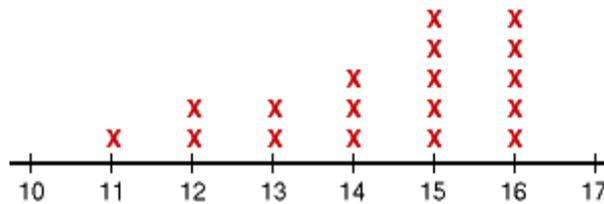
Example:

Growth of Greta's CD Collection

84. line plot :

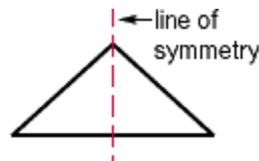A number line with dots or other marks to show frequency

Example:

85. line of symmetry :
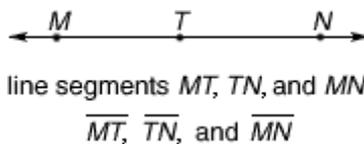
A line that divides a figure into two congruent parts

Example:

86. line segment :

Part of a line with two endpoints

Example:

line segments *MT, TN,* and *MN.*

$\overline{MT}, \overline{TN},$ and $\overline{MN}$

87. lower extreme :

The least number in a set of data

Example:

2, 3, 4, 5, 5, 6, 7, 8, 8, 8, 9, 11

The lower extreme is 2.

88. lower quartile :

The median of the lower half of a set of data

Example:
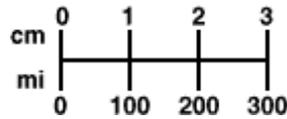
2, 3, 4, 5, 5, 6, 7, 8, 8, 8, 9, 11

The lower quartile is 4.5.

89. map scale :

A ratio that compares the distance on a map with the actual distance

Example:

cm	0	1	2	3

mi: 0   100   200   300

1 centimeter = 100 miles

90. mathematical probability :

The number of favorable outcomes divided by the number of possible outcomes

$$P = \frac{\text{number of favorable outcomes}}{\text{number of possible outcomes}}$$

91. mean :

The average of a group of numbers

Example:

2, 3, 4, 5, 5, 6, 7, 8, 8, 8, 9, 13

$$\frac{2+3+4+5+5+6+7+8+8+8+9+13}{12}$$

$$= \frac{78}{12} = 6.5$$

The mean is 6.5.

92. measure of central tendency :

A measure used to describe data; the mean, median, and mode are measures of central tendency

93. median :

The middle number or the average of the two middle numbers in an ordered set of data

Example:

7.9, 8.0, 8.3, 8.3

The median is between 8.0 and 8.3.

(8.0 + 8.3) ÷ 2 = 16.3 ÷ 2 = 8.15

The median is 8.15.

94. mixed number :

A number that is made up of a whole number and a fraction

Examples:

$$3\frac{3}{4} \qquad 1\frac{7}{8} \qquad 2\frac{1}{6}$$

95. mode :

The number or numbers that occur most often in a collection of data; there can be more than one mode or none at all.

Examples:

2, 3, 4, 5, 5, 6, 7, **8, 8, 8**, 9, 11

The mode is 8.

2, 3, 4, **5, 5, 5**, 7, **8, 8, 8**, 9, 11

The modes are 5 and 8.

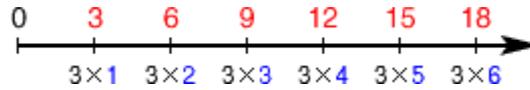2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 17

There is no mode.

96. multiple :

A number that is the product of a given number and a whole number
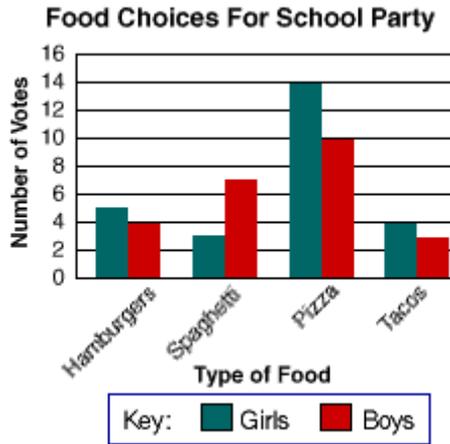
Example:

To find the multiples of any number, multiply the number by the counting numbers 1, 2, 3, 4, and so on. The first six multiples of 3 are shown below in red.

97. multiple-bar graph :
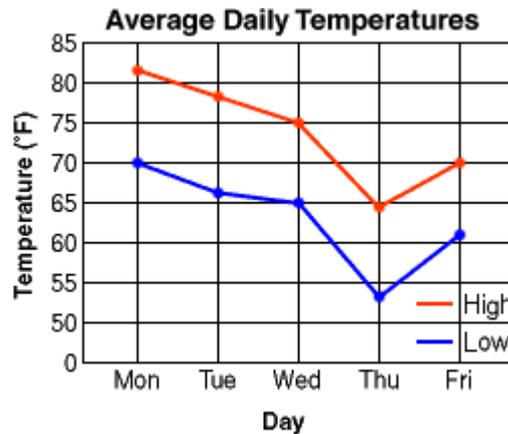
A bar graph showing two or more sets of data at once

Example:

98. multiple-line graph :
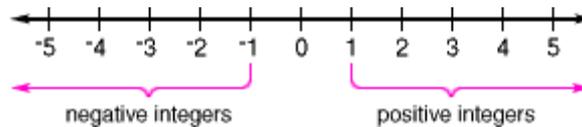
A line graph showing two or more sets of data at once

Example:

99. negative integers :
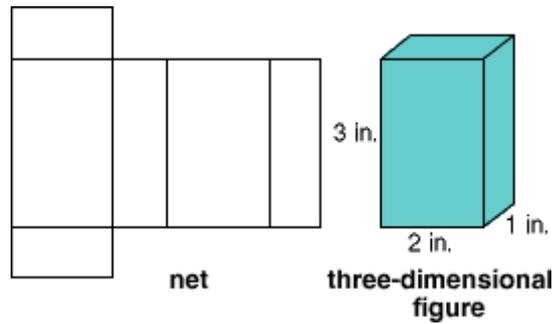
Integers less than 0

Example:

100. net :

An arrangement of two-dimensional figures that fold to form a three-dimensional figure

Example:
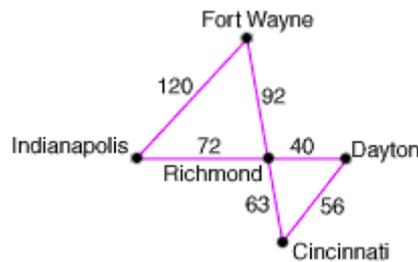

net   three-dimensional figure

3 in. 2 in. 1 in.

101. network :

A graph with vertices and edges. In a network a vertex is a point that represents an object. The edge is a connection between vertices.

Example:

Fort Wayne
120   92
Indianapolis   72   40   Dayton
Richmond
63   56
Cincinnati

102. numerator :

The top part of a fraction

Example:

$\dfrac{3}{4}$ ← numerator

103. numerical expression :

A mathematical phrase that includes only numbers and operation symbols

Examples:
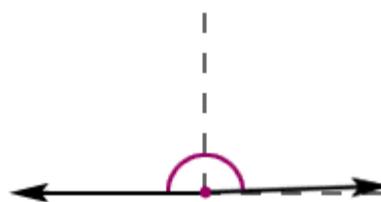
60 + 25   42 ÷ 7 $4^2 - 3$

104. obtuse angle :

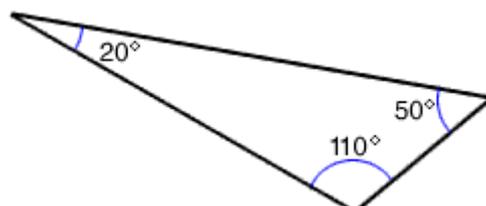An angle whose measure is greater than 90° and less than 180°

Example:

105. obtuse triangle :
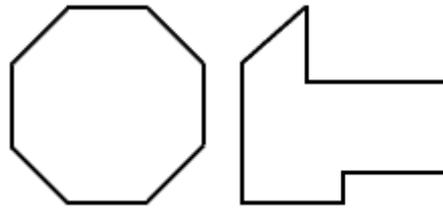
A triangle that has one obtuse angle

Example:

20°   50°   110°

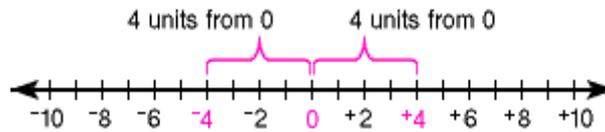**106. octagon :**

An eight-sided polygon
Examples:

107. opposites :

Two numbers that are an equal distance from 0 on the number line
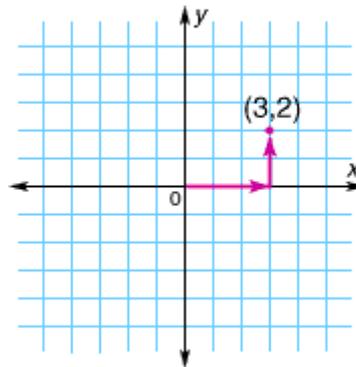*Example*:

4 and -4 are opposites.

108. ordered pair :

A pair of numbers used to locate a point on a coordinate plane
Example:
(3,2) represents 3 spaces to the right of zero and 2 spaces up.

109. order of operations :
The order in which operations are done; first, do the operations within parentheses; next, clear exponents; then, multiply and divide from left to right; and last, add and subtract from left to right.
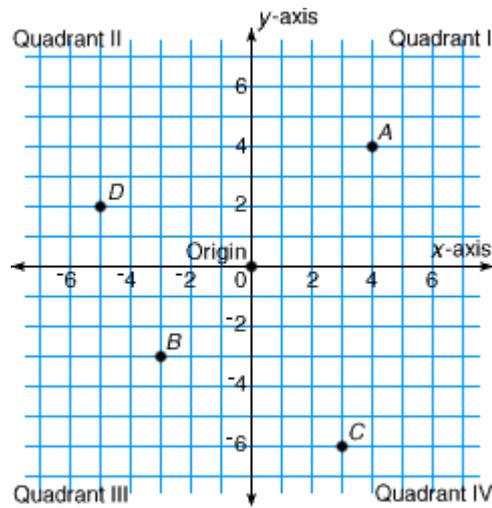*Examples*:

$10 \div 2 + 8 \times 2^3 - 4$	Clear exponent.✗
$10 \div 2 + 8 \times 8 - 4$	Multiply and divide.✗
$5 + 64 - 4$	Add and subtract.
65	.

$10 \div (2 + 8) \times 2^3 - 4$	Add inside parentheses.✗
$10 \div 10 \times 2^3 - 4$	Clear exponent.✗
$10 \div 10 \times 8 - 4$	Multiply and divide.✗
$8 - 4$	Subtract.
4	.

110. origin :
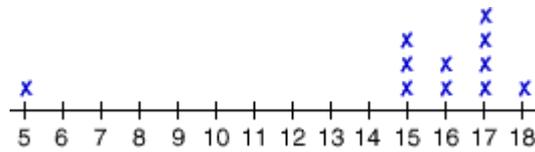The point on the coordinate plane where the *x*-axis and the *y*-axis intersect, (0,0)
Example:

111. outlier :

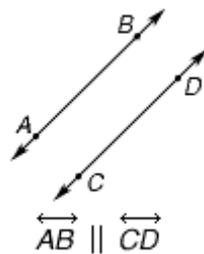A data value that stands out from the other data values in the set.
Example:

Most of the data are from 15 to 18. The outlier in this data set is 5.

112. parallel lines :

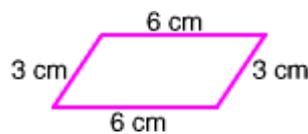Lines in a plane that do not intersect
Example:

$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$

Read: Line *AB* is parallel to line *CD*

113. parallelogram :

A quadrilateral whose opposite sides are parallel and congruent
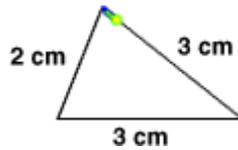*Example*:

114. pentagon:

A five-sided polygon
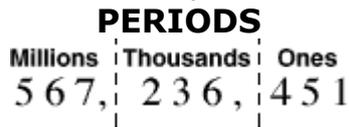*Examples*:

115. perimeter :

The distance around a polygon
Example:

P = 3 cm + 3 cm + 2 cm = 8 cm

116. period :

Each group of three digits in a number
Example:

PERIODS

Millions	Thousands	Ones
5 6 7,	2 3 6,	4 5 1

117. perpendicular lines :

Lines that intersect to form 90° angles, or right angles
Example:

$\overleftrightarrow{RS} \perp \overleftrightarrow{MN}$
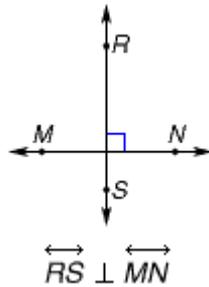
Read: Line *RS* is perpendicular to line *MN*

118. pi :

The ratio of the circumference of a circle to the length of its diameter;
$\pi \approx 3.14$ or $\frac{22}{7}$

119. place value :

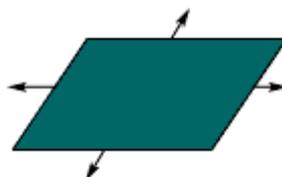The value of a digit as determined by its position in a number
Example:

	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths	Ten Thousandths
1,623,051→	1	6	2	3	0	5	1				
0.0531→							0	0	5	3	1
32.4→						3	2	4			

120. plane :

A flat surface that goes on forever in all directions
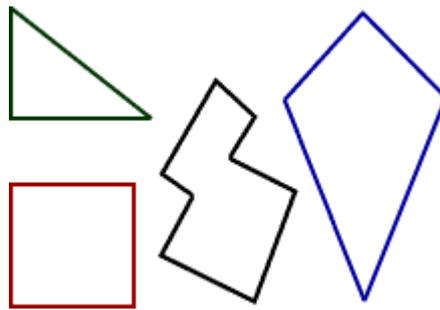*Example*:

121. plane figure :
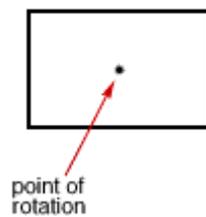
A figure which lies in a plane
Examples:

122. point of rotation :

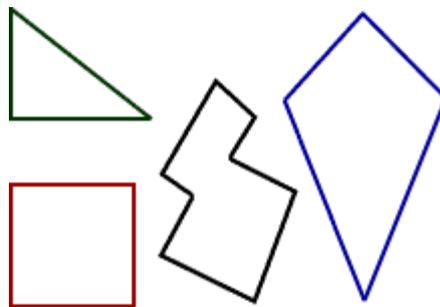The point about which a rotation is centered
Example:

point of
rotation

123. polygon :

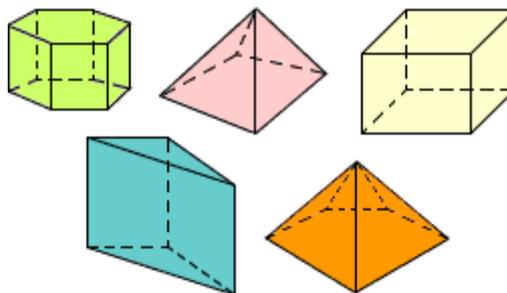A closed plane figure formed by three or more line segments
Examples:

124. polyhedron :

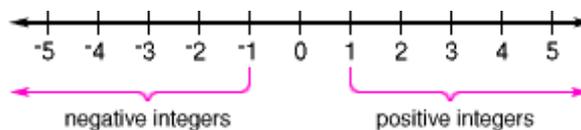A solid figure with flat faces that are polygons
Examples:

125. positive integer :

A whole number greater than zero
Example:

-5 -4 -3 -2 -1   0   1   2   3   4   5
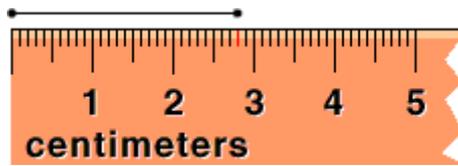
negative integers   positive integers

126. precision :

A property of measurement that is related to the unit of measure used; the smaller the unit of measure used, the more exact the measurement is.
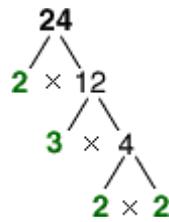
Example:

28 mm is more precise than 3 cm.

127. prime factorization :

A number written as the product of all its prime factors

Example:

24 = 2 X 2 X 2 X 3 or 2^3 X 3

128. prime number :

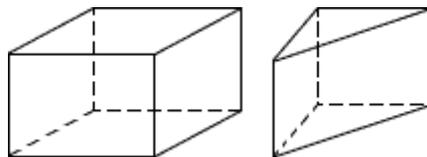A whole number greater than 1 and whose only factors are itself and 1

Examples:

17 ← factors are 17 and 1

29 ← factors are 29 and 1

129. prism :

A solid figure whose bases are congruent, parallel polygons and whose other faces are parallelograms

Examples:

rectangular prism   triangular prism

130. probability (p) :

The chance that an event will occur expressed as the ratio of the number of favorable outcomes to the number of possible outcomes

$$P = \frac{\text{number of favorable outcomes}}{\text{number of total outcomes}}$$

131. product :

The answer in a multiplication problem

Example:

$6 \times 2 = 12$

factors   product

The product is 12.

132. property of zero :

The property which states that the product of 0 and any number is 0

Examples:

8 X 0 = 0

0 X *a* = 0

133. proportion :

A number sentence or an equation that states that two ratios are equivalent
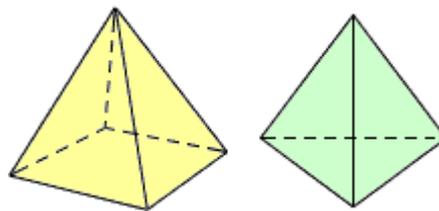
Example:

$$\frac{3}{4} = \frac{6}{8}$$

134. pyramid :

A solid figure whose base is a polygon and whose other faces are triangles with a common vertex
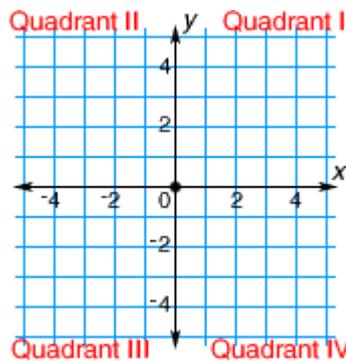
Examples:

rectangular pyramid   triangular pyramid

135. quadrant :

One of the four regions of the coordinate plane

Example:

136. quadrilateral :

A four-sided polygon

Examples:

137. quotient :

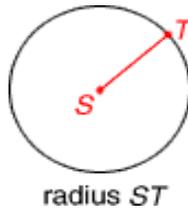The answer in a division problem

Example:

35 ÷ 5 = 7

dividend   divisor   quotient

The quotient is 7.

138. radius :

A line segment with one endpoint at the center of a circle and the other endpoint on the circle

Example:

radius *ST*

139. range :

The difference between the greatest and the least numbers in a set of numbers

Example:

Month	Jun	Jul	Aug	Sep	Oct	Nov
Temperature	82°F	**83°F**	83°F	82°F	82°F	**80°F**

The greatest temperature is 83°F.
The least temperature is 80°F.
Since 83 - 80 = 3, the range is 3°F.

140. rate :

A [ratio](#) that compares two quantities having different units of measure

Example:

$$\text{rate: } \frac{\text{price}}{\text{number of ounces}} \rightarrow \frac{\$3.28}{20 \text{ oz}}$$

141. ratio :

A comparison of two numbers or quantities

Example:

3 to 5, or 3:5, or $\frac{3}{5}$

142. rational number :

Any number that can be expressed as a ratio in the form of $\frac{a}{b}$ where *a* and *b* are integers and $b \neq 0$
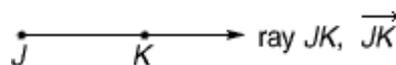
Examples:

$$0.5 \qquad \frac{3}{5} \qquad -3 \qquad 8 \qquad 3\frac{9}{10}$$

143. ray :

A part of a line that has one endpoint and goes on forever in only one direction

Example:

ray *JK*, $\overrightarrow{JK}$

144. reciprocal :

One of two numbers whose product is 1

Example:

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

$\frac{3}{2}$ is the reciprocal of $\frac{2}{3}$.

$\frac{2}{3}$ is the reciprocal of $\frac{3}{2}$.

145. rectangle :

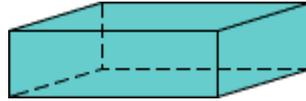A parallelogram with 4 right angles

Example:

146. rectangular prism :

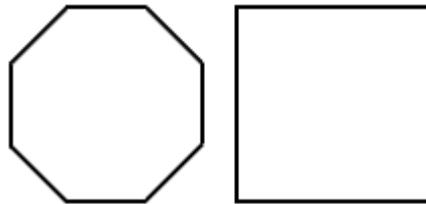A solid figure in which all six faces are rectangles

Example:

147. regular polygon :

A polygon in which all sides and all angles are congruent

Example:

148. relation :

A set of ordered pairs

Example:

(5,1)   (10,2)   (15,3)   (20,4)   (25,5)

149. repeating decimal :

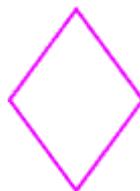A decimal in which one or more digits repeat endlessly

Examples:

$0.333\ldots$, or $0.\overline{3}$

$5.272727\ldots$, or $5.\overline{27}$

150. rhombus :

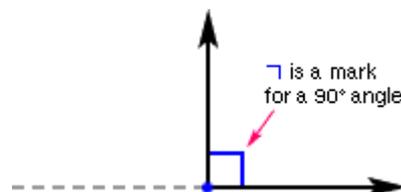A parallelogram whose four sides are congruent and whose opposite angles are congruent

Example:
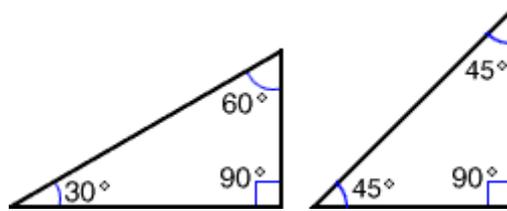
151. right angle :

An angle whose measure is 90°

Example:

⌐ is a mark
for a 90° angle.

152. right triangle :

A triangle with exactly one right angle
Examples:

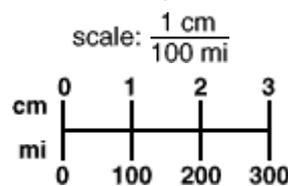## 153. sample space :

The set of all possible outcomes
Example:

The sample space is 1, 2, 3, 4, 5, 6.

154. scale :

The ratio between two sets of measurements
Example:

scale: $\frac{1 \text{ cm}}{100 \text{ mi}}$

155. scale drawing :

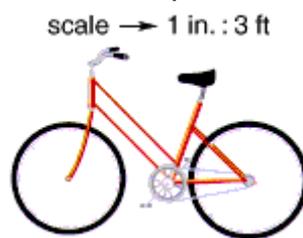A reduced or enlarged drawing whose shape is the same as an actual object and
whose size is determined by the scale
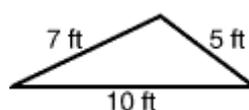*Example*:

scale ➝ 1 in. : 3 ft

156. scalene triangle :

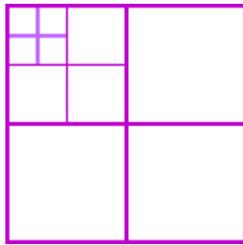A triangle with no congruent sides
Example:

157. self-similarity :

A figure has self-similarity if it contains a repeating pattern of smaller and smaller
parts that are like the whole, but different in size
Example:

158. simple interest :

The amount obtained by multiplying the principal by the rate by the time; $I = prt$

Example:

Carol invested $150 at a simple interest rate of 4%. Find the interest she will earn in 1 year.

$I = prt$	
$I = 150 \times 4\% \times 1$	$p = \$150, r = 4\%, t = 1$ year
$I = 150 \times 0.04 \times 1$	*Multiply.*
$I = 6$	

So, the interest earned in 1 year is $6.

159. simplest form :

A fraction is in simplest form when the numerator and denominator have no common factors other than 1.

Example:

$$\frac{6}{18} = \frac{6 \div 6}{18 \div 6} = \frac{1}{3}$$

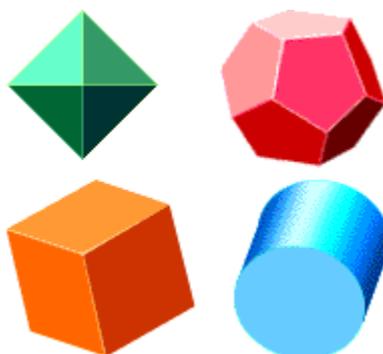The simplest form of $\frac{6}{18}$ is $\frac{1}{3}$.

160. simulation :

A model of an experiment that would be too difficult or too time-consuming to actually perform

161. solid figure :

A three-dimensional figure

Examples:

162. solution :

The value of the variable that makes an equation true

Example:

$x + 4 = 7$ Since **3** + 4 = 7, then $x = 3$.

163. solve :

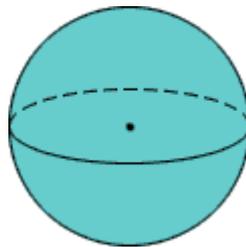To find the value of a variable that makes an equation true
Example:

c - 12 =	17	*Write the equation.*
c - 12 + 12 =	17 + 12	*Add 12 to each side.*
c =	29	

164. sphere :

A solid with all points an equal distance from the center
Example:

165. square :

To square a number means to multiply it by itself
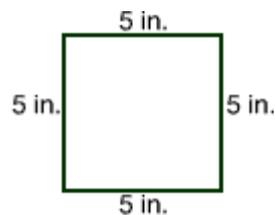A square can be expressed with the exponent 2.
Read 3^2 as "3 squared."
Examples:
$3^2 = 3 \times 3 = 9$ So, $3^2 = 9$.

$8^2 = 8 \times 8 = 64$ So, $8^2 = 64$.

A rectangle with 4 congruent sides
Example:

166. square root :

One of the two equal factors of a number; the symbol for square root is $\sqrt{\ }$.
Example:
$\sqrt{25} = 5$ because $5^2 = 5 \times 5 = 25$.

167. standard form :

The form in which numerals are usually written, with digits 0 through 9
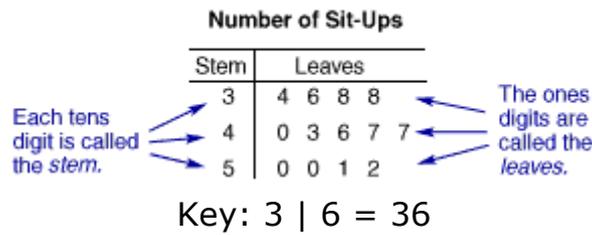*Examples*:
thirthy-five: **35** ←standard form
three hundred seventy-one: **371** ←standard form

168. stem-and-leaf plot :

A method of organizing data in order to make comparisons; the ones digits appear horizontally as leaves, and the tens digits and greater appear vertically as stems

Example:

Number of Sit-Ups

Stem	Leaves
3	4 6 8 8
4	0 3 6 7 7
5	0 0 1 2

Each tens digit is called the *stem*.

The ones digits are called the *leaves*.

Key: 3 | 6 = 36

169. straight angle :
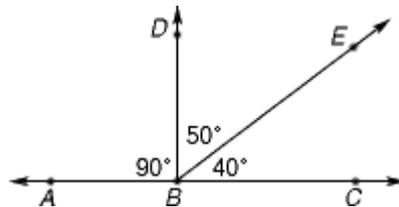
An angle whose measure is 180°

Example:

170. supplementary angles :

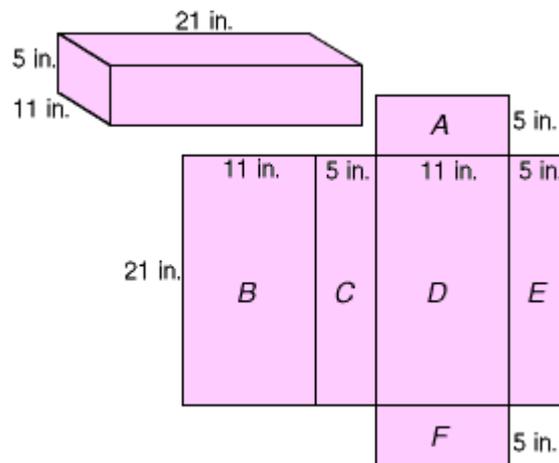Two angles whose sum equals 180°

Example:

$\angle ABD$ and $\angle DBC$ are supplementary.

171. surface area :

The sum of the areas of all the faces, or surfaces, of a solid figure

Example:

Area of face A = 11 X 5 = 55
Area of face B = 21 X 11 = 231
Area of face C = 21 X 5 = 105
Area of face D = 21 X 11 = 231
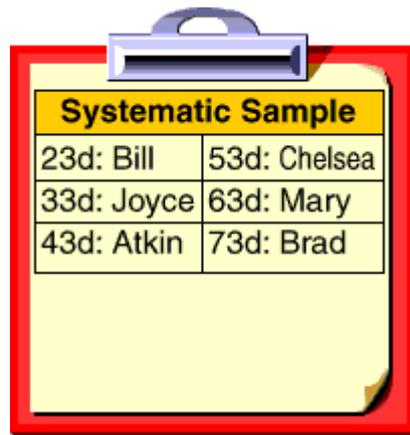Area of face E = 21 X 5 = 105
Area of face F = 11 X 5 = 55
55 + 231 + 105 + 231 + 105 + 55 = 782
So, the surface area is 782 in^2.

172. systematic sample :

A sample of a population that has been selected using a pattern

Example:

Systematic Sample	
23d: Bill	53d: Chelsea
33d: Joyce	63d: Mary
43d: Atkin	73d: Brad

173. tally table :

A table with categories for recording each piece of data as it is collected

Example:

Favorite Snack Foods	
Snack	**Tally**
Fruit	ꘓꘓ ꘓꘓ
Cereal	ꘓꘓ
Chips	ꘓꘓ IIII
Cookies	ꘓꘓ III

174. term :

Each of the numbers in a sequence

Example:

3, 6, 12, 24

6 is a term in the sequence.

One of the numbers in a ratio

Example:

$\dfrac{1}{64}$ ← first term
← second term

175. terminating decimal :

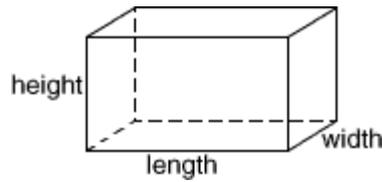A decimal that ends; a decimal for which the division operation results in a remainder of zero

Examples:

$$\frac{1}{2} \rightarrow 2\overline{)1.0} = 0.5$$
$$\frac{10}{0}$$

$$\frac{5}{8} \rightarrow 8\overline{)5.000} = 0.625$$
$$\frac{48}{20}$$
$$\frac{16}{40}$$
$$\frac{40}{0}$$

176. three-dimensional :

Having length, width, and height
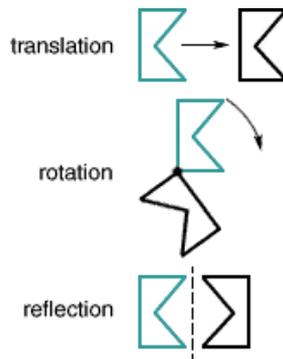*Example*:

height | width
length

The rectangular prism is three-dimensional.

177. transformation :

A movement that doesn't change the size or shape of a figure is a rigid transformation.
Examples:

translation

rotation

reflection

178. trapezoid :

A quadrilateral with only two parallel sides
Example:

179. tree diagram :

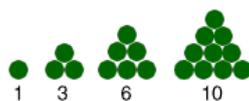A diagram that shows all the possible outcomes of an event
Example:

Pants	Shirts	Possible Outcomes
blue	red	blue pants with red shirt
	green	blue pants with green shirt
	white	blue pants with white shirt
tan	red	tan pants with red shirt
	green	tan pants with green shirt
	white	tan pants with white shirt
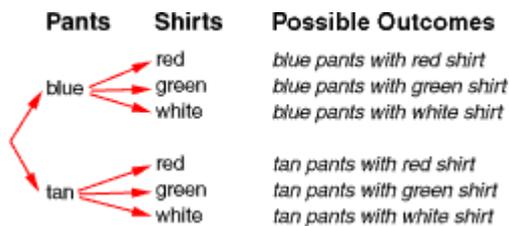
180. triangular number :

A number that can be represented by a triangular array
Examples:

1   3   6   10

181. unit rate :

A rate in which the second term is 1
Example:

rate: $\dfrac{price}{number\ of\ ounces} \rightarrow \dfrac{\$3.28}{20\ oz}$

unit rate: $\dfrac{\$3.28}{20\ oz} = \dfrac{\$3.28 \div 20}{20\ oz \div 20} = \dfrac{\$0.16}{1\ oz}$

182. unlike fractions :

Fractions that have different denominators
Example:

$$\frac{3}{4} \text{ and } \frac{2}{3}$$

Three-fourths and two-thirds are unlike fractions.

183. upper extreme :

The greatest number in a set of data
Example:
2, 3, 4, 5, 5, 6, 7, 8, 8, 8, 9, **11**
The upper extreme is 11.

184. upper quartile :

The median of the upper half of a set of data
Example:

2, 3, 4, 5, 5, 6, 7, 8, 8, 8, 9, 11

The upper quartile is 8.

185. variable :

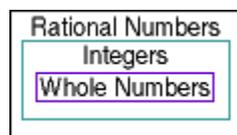A letter or symbol that stands for one or more numbers
Examples:
$5 + n \qquad k - 3$

186. venn diagram :

A display which shows relationships among sets by using ovals or other shapes to represent individual sets
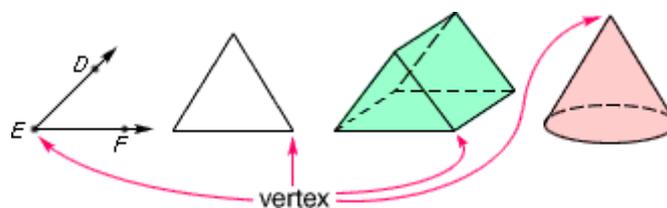*Example*:

Rational Numbers
Integers
Whole Numbers

187. vertex :

The point where two or more rays meet; the point of intersection of two sides of a polygon; the point of intersection of three or more edges of a solid figure; the top point of a cone
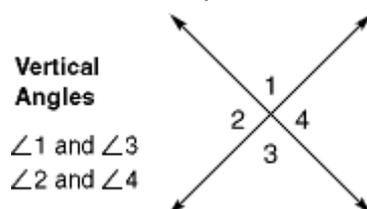*Examples*:

vertex

188. vertical angles :

A pair of opposite congruent angles formed by intersecting lines
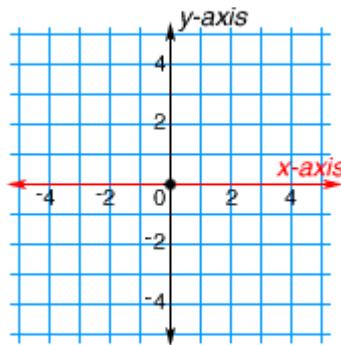*Example*:

Vertical
Angles

∠1 and ∠3
∠2 and ∠4

189. x-axis :

The horizontal axis on the coordinate plane
Example:

190. x-coordinate :

The first number in an ordered pair; tells whether to move right or left
along the *x*-axis of the coordinate plane
Example:

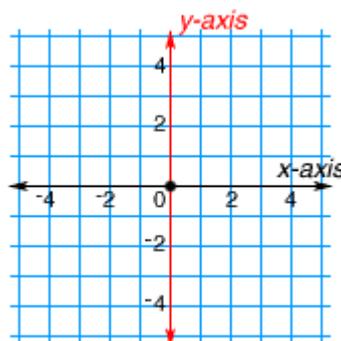(4, 7)

x-coordinate

191. y-axis :

The vertical axis on the coordinate plane
Example:

192. y-coordinate :

The second number in an ordered pair; tells whether to move up or
down along the *y*-axis of the coordinate plane
Example:

(4, 7)

y-coordinate