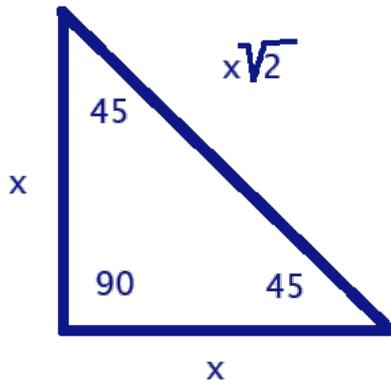


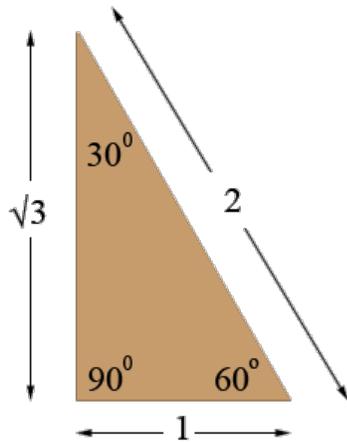
1. -3^2 9
2. -3^3 -27
3. $(2^2)^3$ 2^6
4. $(6\sqrt{3}) \times (2\sqrt{5}) =$ $(6 \times 2)(\sqrt{3} \times \sqrt{5}) = 12\sqrt{15}$
5. $(12\sqrt{15}) / (2\sqrt{5}) =$ $(12/2) \times (\sqrt{15} / \sqrt{5}) = 6\sqrt{3}$
6. $(a^{-1})/a^5$ $1/a^6$
7. $(x-y)(x+y)$ x^2-y^2
8. $(x-y)^2$ $x^2-2xy+y^2$
9. $(x^2)^4$ $x^{2(4)} = x^8 = (x^4)^2$
10. $(x+y)^2$ $x^2+2xy+y^2$

11. #1 What are the important properties of a 45-45-90 triangle?



- The triangle is a right triangle.

12. #1 What is an important property of a 30-60-90 triangle?

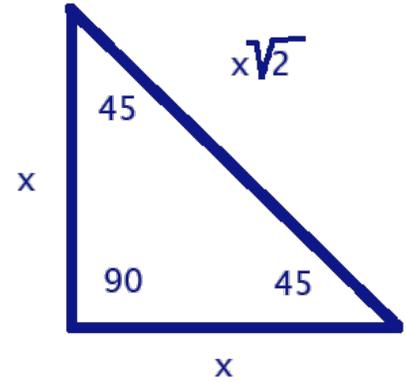


- The triangle is a right triangle.

13. #1 What is the relationship between lengths of the sides of a triangle and the measure of the angles of the triangle?

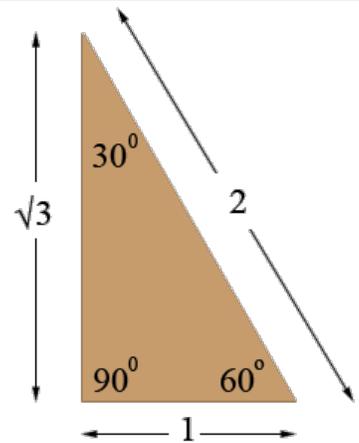
- The longest side is opposite the largest (biggest) angle.

14. #2 What are the important properties of a 45-45-90 triangle?



- The triangle is isosceles ($AC=BC$).

15. #2 What is an important property of a 30-60-90 triangle?

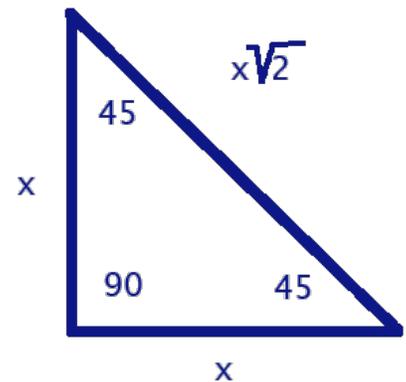


- The hypotenuse is twice the length of the shorter leg.

16. #2 What is the relationship between lengths of the sides of a triangle and the measure of the angles of the triangle?

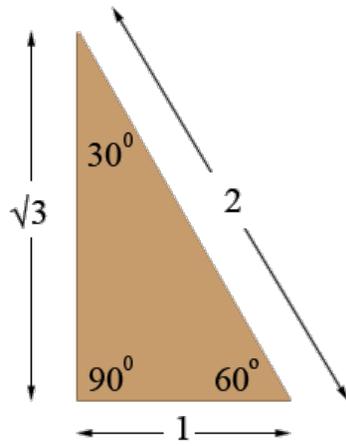
- The shortest side is opposite the smallest angle.

17. #3 What are the important properties of a 45-45-90 triangle?



- The ratio of the lengths of the three sides is $x:x:x\sqrt{2}$.

18. #3 What is an important property of a 30-60-90 triangle?



• The ratio of the length of the three sides is $x:x\sqrt{3}:2x$

19. #3 What is the relationship between lengths of the sides of a triangle and the measure of the angles of the triangle?

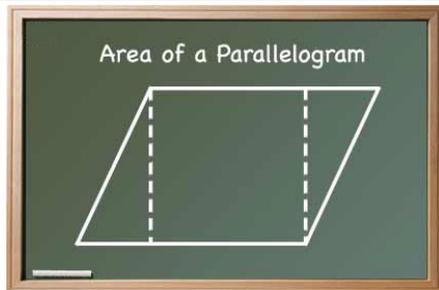
• Sides with the same lengths are opposite angles with the same measure.

20. \emptyset divided by 7	\emptyset
21. \emptyset Is	EVEN
22. \emptyset is	Even
23. \emptyset is	A multiple of every integer
24. \emptyset is a multiple of	Every number
25. \emptyset is a multiple of	Two ($\emptyset \times 2 = \emptyset$)
26. \emptyset Is neither	Positive or Negative
27. \emptyset^2	\emptyset
28. 0^0	undefined
29. 1 is a divisor of	every number
30. 1 is an	ODD number
31. 1 is the	smallest positive integer
32. 1:1:sqrt2 is the ratio of the sides of what kind of triangle?	An isosceles right triangle.
33. 1:sqrt3:2 is the ratio of the sides of what kind of triangle?	A 30-60-90 triangle.
34. 1/2 divided by 3/7 is the same as	1/2 times 7/3
35. 1/6 in percent?	16.6666%
36. 1/8 in percent?	12.5%
37. 1^n	1
38. 2 is the only	Even prime number
39. $2^3 \times 7^3$	$(2 \times 7)^3$

40. $2^5/2^3$	2^2
41. 2^5+2^3	2^8
42. 3 is the opposite of	-3
43. 3/8 in percent?	37.5%
44. 5 bakeries sell an average of 300 muffins per bakery per day. If 2 stop making muffins but the total muffins sold stays the same, what is the average of muffins per bakery sold among the remaining?	500
45. 5/6 in percent?	83.333%
46. 5/8 in percent?	62.5%
47. $5x^2 - 35x - 55 = 0$	$[(7 + \sqrt{93})/2], [(7 - \sqrt{93})/2]$
48. $6w^2 - w - 15 = 0$	$-3/2, 5/3$
49. 7 divided by \emptyset	Null
50. 7/8 in percent?	87.5%
51. $8.84 / 5.2$	1.7
52. 10^6 has how many zeroes?	6
53. $10 < \text{all primes} < 20$	11, 13, 17, 19
54. $20 < \text{all primes} < 30$	23, 29
55. $25^{(1/2)}$ or sqrt. 25 =	5 OR -5
56. 30 60 90	$3x, 4x, 5x$
57. 30 60 90	$x, x(\sqrt{3}), 2x$
58. 30 60 90	3, 4, 5
59. 30 60 90	5, 12, 13
60. $30 < \text{all primes} < 40$	31, 37
61. $40 < \text{all primes} < 50$	41, 43, 47
62. $50 < \text{all primes} < 60$	53, 59
63. $60 < \text{all primes} < 70$	61, 67
64. $70 < \text{all primes} < 80$	71, 73, 79
65. $200 < x < 300$. How many values of x are divisible by 5 & 8?	3
66. $a(b-c)$	$ab-ac$
67. $a(b+c)$	$ab+ac$

68. a/\emptyset	Null
69. $a^0 =$	1
70. $a^2 - 2ab + b^2$	$(a - b)^2$
71. $a^2 - b^2$	$(a - b)(a + b)$
72. $a^2 - b^2 =$	$(a - b)(a + b)$
73. $a^2 + 2ab + b^2$	$(a + b)^2$
74. $a < b$ then $a - b$ is positive or negative?	$a - b$ is negative
75. $a > b$ then $a - b$ is positive or negative?	$a - b$ is positive
76. An Angle that's 180°	Straight Angle
77. Any Horizontal line slope	zero
78. Area of a circle	$(\pi)r^2$
79. Area of a circle	$A = \pi \cdot (r^2)$

80. **Area of a Parallelogram:**



$$A = (\text{base})(\text{height})$$

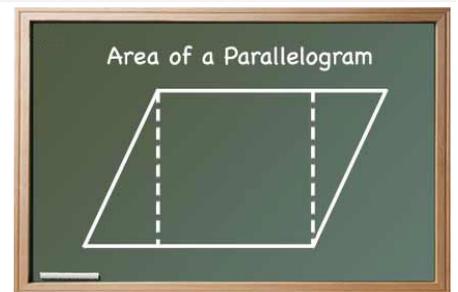
81. Area of a rectangle	$A = \text{length} \times \text{width}$
82. Area of a triangle	$A = (1/2) b \cdot h$
83. Area of a triangle?	$(\text{base} \cdot \text{height}) / 2$
84. b^1	1
85. binomial product of $(x-y)^2$	$(x+y)(x-y)$
86. binomial product of $(x+y)(x-y)$	$x^2 - y^2$
87. binomial product of $(x+y)^2$	$(x+y)(x+y)$
88. b^n	$b \wedge b \wedge b$ (where b is used as a factor n times)

89. **A brick with dimensions 10, 15 and 25 weighs 1.5 kg. A second brick (same density) has dimensions 12, 18, and 30. What is the weight of the second brick?** 2.592 kg

90. Can you add $\sqrt{3}$ and $\sqrt{5}$?	No, only like radicals can be added.
91. Can you simplify $\sqrt{72}$?	Yes, because you can factor out a perfect square (36). $\sqrt{36 \times 2} = \sqrt{36} \times \sqrt{2} = 6\sqrt{2}$.
92. Can you subtract $3\sqrt{4}$ from $\sqrt{4}$?	Yes, like radicals can be added/subtracted.
93. Circumference of a Circle	$c = 2 \times \pi \times r$ OR $\pi \times d$
94. Circumference of a circle	$\pi(\text{diameter})$
95. Circumference of a circle	$2(\pi)r$
96. Circumference of a circle?	Diameter(π)

97. **A company places a 6-symbol code on each product. The code consists of the letter T, followed by 3 numerical digits, and then 2 consonants (Y is a conson). How many codes are possible?**
 $441000 = 1 \cdot 10 \cdot 10 \cdot 10 \cdot 21 \cdot 21$

98. **The consecutive angles in a parallelogram equal**



$$180^\circ$$

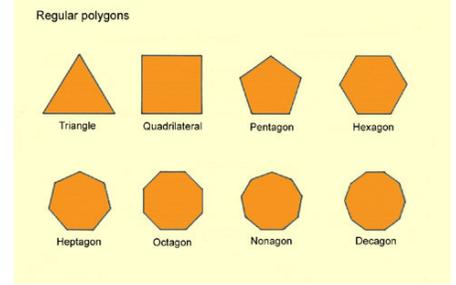
99. **Consecutive integers** $x, x+1, x+2$

100. Convert 0.7% to a fraction.	7 / 1000	115. Evaluate and write as a mixed number: $\frac{2}{7} - \frac{3}{21} + 2 \frac{4}{14}$	$2 \frac{3}{7}$
101. A cylinder has a surface area of 22π . If the cylinder has a height of 10, what is the radius?	1	116. Factor $a^2 + 2ab + b^2$	$(a + b)^2$
102. A cylinder has surface area 22π . If the cylinder has a height of 10, what is its radius?	1	117. Factor $x^2 - xy + x$.	$x(x - y + 1)$
103. Define a "monomial"	An expression with just one term ($-6x$, $2a^2$)	118. factored binomial product of $(x-y)^2$	$x^2 - 2xy + y^2$
104. Define a "term",	A term is a numerical constant or the product (or quotient) of a numerical constant and one or more variables. ($3x$, $4x^2$ and $2a/c$)	119. factored binomial product of $(x+y)^2$	$x^2 + 2xy + y^2$
105. Define an "expression".	An algebraic expression is a combination of one of more terms. Terms in an expression are separated by either addition or subtraction signs. ($3xy$, $4ab$, $-5cd$, $x^2 + x - 1$)	120. Find distance when given time and rate	$d=rt$ so $r= d/t$ and $t=d/r$
106. THE DENOMINATOR CAN NEVER	BE ZERO! $1/\emptyset = \text{null}$	121. Find the surface area of a cylinder with radius 3 and height 12.	90π
107. Describe the relationship between $3x^2$ and $3(x - 1)^2$	The graph of $3(x - 1)^2$ is a translation (shift) of the graph one unit or space to the right.	122. First 10 prime #s	2, 3, 5, 7, 11, 13, 17, 19, 23, 29 A prime number (or a prime) is a natural number greater than 1 that has no positive divisors other than 1 and itself
108. Describe the relationship between the graphs of x^2 and $(\frac{1}{2})x^2$	The second graph is less steep.	123. For any number x	Can be negative, zero, or positive
109. Distance	(rate)(time) $d=rt$	124. For similar triangles, the ratio of their corresponding sides is 2:3. What is the ratio of their areas?	4:9. The ratio of the areas of two similar triangles equals the square of the ratio of the corresponding sides.
110. Dividing by a number is the same as multiplying it by its	Reciprocal	125. For what values should the domain be restricted for the function $f(x) = \sqrt{x + 8}$	-8
111. Employee X is paid 19.50 per hour no matter how many a week. Employee Y earns 18 for the first 40 and 1.5 the hourly wage for every hour after that. If both earned the same amount and worked the same in one week, how many did each work?	48	126. formula for area of a triangle	$A = \frac{1}{2}bh$
112. Evaluate $(4^3)^2$	4096	127. formula for distance problems	distance=rate×time or $d=rt$
113. Evaluate $3 \frac{2}{7} / \frac{1}{3}$	$9 \frac{6}{7}$	128. Formula for the area of a circle?	$A = \pi(r^2)$
114. Evaluate $\frac{4}{11} + \frac{11}{12}$	$1 \frac{37}{132}$	129. Formula for the area of a sector of a circle?	Sector area = $(\frac{n}{360}) X (\pi)r^2$
		130. formula for the volume of a cube	$V = \text{side}^3$
		131. formula for volume of a rectangular solid	$V = l \times w \times h$
		132. Formula to calculate arc length?	Arc length = $(\frac{n}{360}) \times \pi(2r)$ where n is the number of degrees.
		133. Formula to find a circle's circumference from its diameter?	$C = (\pi)d$

134. Formula to find a circle's circumference from its radius?	$C = 2(\pi)r$	
135. The four angles around a point measure y, $2y$, 35 and 55 respectively. What is the value of y?	90	
136. From a box of 12 candles, you are to remove 5. How many different sets of 5 candles could you remove?	$12! / 5!7! = 792$	
137. Hector invested \$6000. Part was invested in account with 9% simple annual interest, and the rest in account with 7% simple annual interest. If he earned \$490 in the first year of these investments, how much did he invest in each account?	\$3,500 in the 9% and \$2,500 in the 7%.	
138. How do you solve proportions? $a/b=c/d$	Cross multiplication $a/b=c/d$ $4/6=10/15$ $4(15)=6(10)$ $60=60$	
139. How many 3-digit positive integers are even and do not contain the digit 4?	288 (8 9 4)	
140. How many digits are there between the decimal point and the first even digit in the decimal equivalent of $1/[(2^8)(5^3)]$	0	
141. How many multiples does a given number have?	Infinite.	
142. How many sides does a hexagon have?	6	
143. How to determine percent decrease?	(amount of decrease/original price) x 100%	
144. How to find the circumference of a circle which circumscribes a square?	Circumference = Diameter(π). Use pythagorean theorem to find the diagonal of the square (the diameter).	
145. How to recognize a # as a multiple of 3	The sum of the digits is a multiple of 3 (i.e. $45 \dots 4 + 5 = 9$ so the whole thing is a multiple of 3)	
146. How to recognize a # as a multiple of 4		The last 2 digits are a multiple of 4. (i.e $144 \dots 44$ is a multiple of 4, so 144 must also be a multiple of 4.)
147. How to recognize a # as a multiple of 9		The sum of the digits is a multiple of 9.
148. How to recognize a multiple of 6		Sum of digits is a multiple of 3 and the last digit is even.
149. How to recognize if a # is a multiple of 12		The sum of the digits it a multiple of 3 and the last two digits is a multiple of 4. (i.e $144: 1+4+4=9$ which is a multiple of 3, and 44 is a multiple of 4, so 144 is a multiple of 12.)
150. If 8 schools are in a conference, how many games are played if each team plays each other exactly once?		$28. n = 8, k = 2. n! / k!(n-k)!$
151. If 4500 is invested at a simple interest rate of 6%, what is the value of the investment after 10 months?		4725
152. If 10800 is invested at a simple interest rate of 4%, what is the value of the investment after 18 months?		\$11,448
153. If a is inversely porportional to b, what does it equal?		$ab=k$ (k is a constant)
154. If a is negative and n is even then a^n is (positive or negative?)		a^n is positive
155. If a is positive, a^n is		Positive
156. If a lamp decreases to \$80, from \$100, what is the decrease in price?		$= (\text{actual decrease}/\text{Original amount}) \times 100\%$ $= 20/100 \times 100\% = 20\%$
157. If a lamp increases from \$80 to \$100, what is the percent increase?		$= 25\%.$ $= (\text{actual increase}/\text{original amount}) \times 100\%$ $= 20/80 \times 100\% = 1/4 \times 100\% = 25\%$
158. If a pair of parallel lines is cut by a transversal that's not perpendicular, the sum of any acute angle and any obtuse angle is		180 Acute Angle an angle that is less than 90° Obtuse Angle: angle that is greater than 90° but less than 180°

159. If a product of two numbers is \emptyset , one number must be	\emptyset
160. If $a < b$, then	$a + c < b + c$
161. If $a = -1$ and $b = 3$, what is the value of $(4(a^3)(b^2) - 12(a^2)(b^5)) / (16(a^3)(b^2))$?	20.5
162. If $a > b$ then	$-a < -b$
163. If an inequality is multiplied or divided by a negative number....	the direction of the inequality is reversed.
164. If E is certain	$P(E) = 1/1 = 1$
165. If Event is impossible	$P(E) = \emptyset$
166. If Madagascar's exports totaled 1.3 billion in 2009, and 4% came from China, what was the value in millions of the country's exports to China?	52
167. If r, t, s & u are distinct, consecutive prime numbers, less than 31, which of the following could be an average of them (4, 4.25, 6, 9, 24, 22, 24)	4.25, 6, 22
168. If the 80th percentile of the measurements is 72 degrees, about how many measurements are between 69 degrees and 72 degrees? Round your answer to the nearest tenth	18
169. If the two sides of a triangle are unequal then the longer side.....	lies opposite the greater angle
170. If y is directly proportional to x, what does it equal?	y/x is a constant
171. If you have a set of n objects, but you only want to order k of them, what formula do you use to determine the number of permutations?	$n! / (n - k)!$
172. In a rectangle, all angles are	Right
173. In a Rectangle, each angles measures	90°

174. In a Regular Polygon, the measure of each exterior angle

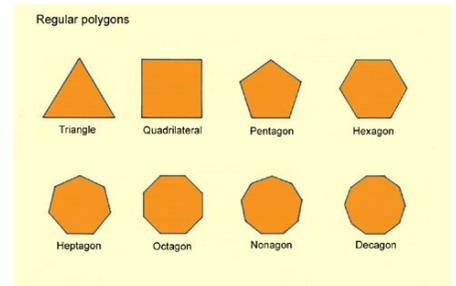


$$360/n$$

175. In a triangle where the two legs are 4 and 3, what is the value of a line directly intersecting the middle coming from the meeting point of the two legs?

2.4. We calculate the area (6) and then turn the triangle on its side and use x as the height to calculate again. $(5x)/2 = 6$

176. In any polygon, all external angles equal up to



$$360^\circ$$

177. In similar hexagons, the ratio of the areas is 16:25. What is the ratio of their corresponding sides?

4:5

178. Is 0 even or odd?

Even

179. The larger the absolute value of the slope...

the steeper the slope.

180. Legs 5, 12. Hypotenuse?

13

181. Legs 6, 8. Hypotenuse?

10

182. Legs: 3, 4. Hypotenuse?

5

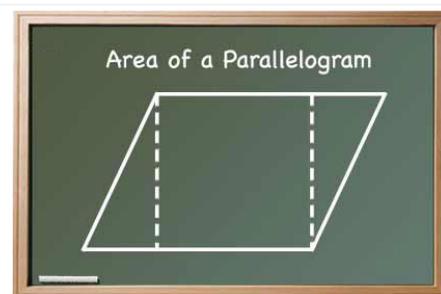
183. the measure of a straight angle

180°

184. The negative exponent x^{-n} is equivalent to what?	$1/x^n$ i.e. $5^{-3} = 1/(5^3) = 1/125 = .008$
185. Nine coins are tossed simultaneously. In how many of the outcomes will the fourth coin tossed show heads?	$2^9 / 2 = 256$
186. A number is divisible by 3 if ...	the sum of its digits is divisible by 3.
187. A number is divisible by 4 is...	its last two digits are divisible by 4.
188. A number is divisible by 6 if...	its divisible by 2 and by 3.
189. A number is divisible by 9 if...	the sum of digits is divisible by 9.
190. Number of degrees in a triangle	180
191. The objects in a set are called two names:	members or elements
192. One is (a prime or not?)	NOT A PRIME
193. The only number that is equal to its opposite	$\emptyset \emptyset = \emptyset$
194. P and r are factors of 100. What is greater, pr or 100?	Indeterminable.
195. The percent decrease of a quantity	$= (\text{actual decrease} / \text{Original amount}) \times 100\%$
196. Perfect Squares 1-15	1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225
197. The Perimeter of a rectangle	$P=2(l+w)$
198. Perimeter of a rectangle	$P= 2L + 2w$
199. The Perimeter of a Square	$P=4s$ (s=side)
200. The perimeter of a square is 48 inches. The length of its diagonal is:	$12\sqrt{2}$
201. Pi is a ratio of what to what?	Pi is the ratio of a circle's circumference to its diameter.
202. Positive integers that have exactly 2 positive divisors are	Prime numbers (2, 3, 5, 7, 11, 13, 17, 19, 23)
203. Probability of an Event	$P(E) = \text{number of favorable outcomes} / \text{total number of possible outcomes}$
204. Probability of E not occurring:	$1 - P(E)$
205. Probability of Event all cases	$\emptyset \leq P(E) \leq 1$

206. Product of any number and \emptyset is	\emptyset
207. The product of any number x and its reciprocal	1
208. The product of odd number of negative numbers	Negative
209. Pythagorean theorem	$a^2 + b^2 = c^2$

210. **A quadrilateral where two diagonals bisect each other**



Parallelogram

211. Rate	d/t (distance)/(time)
212. Ratio of ages of Anna and Emma is 3:5 and of Emma and Nicolas is 3:5. What is the ratio of Anna to Nicholas' ages?	9 : 25
213. The ratio of the areas of two similar polygons is the square of the ratios of the corresponding sides.
214. The reciprocal of any non-zero #x is	$1/x$
215. The reciprocal of any non-zero number is	$1/x$
216. Reduce: 4.8 : 0.8 : 1.6	6 : 1 : 2
217. Simplify $(a^2 + b)^2 - (a^2 - b)^2$	$4a^2(b)$
218. Simplify $4\sqrt{21} \times 5\sqrt{2} / 10\sqrt{7}$	$2\sqrt{6}$
219. Simplify $9^{(1/2)} \times 4^3 \times 2^{(-6)}$	3

220. Simplify the expression $(p + q)/5$
 $(p^2 - q^2) / -5(q - p)$

221. Simplify the expression $(b + c)$
 $[(b^2 - c^2) / (b - c)]$

222. Slope $y_2 - y_1 / x_2 - x_1$

223. Slope given 2 points $m = (Y_1 - Y_2) / (X_1 - X_2)$

224. the slope of a line in $y = mx + b$ m

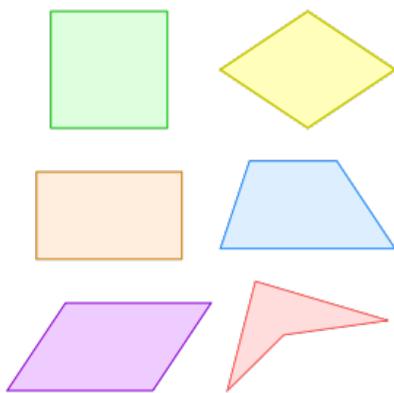
225. Slope of any line that goes down as you move from left to right is Negative

226. Slope of any line that goes up from left to right Positive

227. Solve the quadratic equation $ax^2 + bx + c = 0$
 $x = [(-b) \pm \sqrt{b^2 - 4ac}] / 2a$

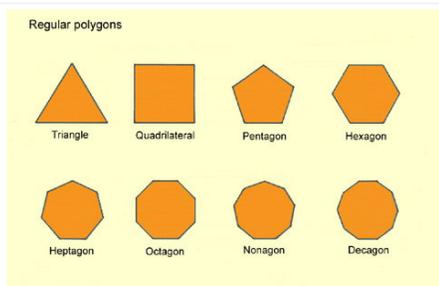
228. The sum of all angles around a point 360°

229. The sum of the angles in a quadrilateral is



360°

230. The sum of the measures of the n angles in a polygon with n sides



$(n-2) \times 180$

231. Suppose that the graph of $f(x)$ is the result of sliding the graph of $y = 2x^2 - 3$ down 3 units of spaces. What is the new equation?

232. Suppose that the graph of $f(x)$ is the result of stretching $y = x + 5$ away from the x -axis by a factor of 2. What is the new equation for the graph $f(x)$? $y = (x + 5)/2$

233. Suppose you have a set of n objects, and you want to select k of them, but the order doesn't matter. What formula do you use to determine the number of combinations of n objects taken k at a time? $n! / (k!(n-k)!)$

234. T or F? Given $d, e \neq 0$, $[(d^3)e(f^5)] / 2d(e^3) / [3(d^2)(e^3)(f^7)] / [6(e^5)(f^2)]?$ True

235. There are 10 finalists for the school spelling bee. A first, second, and third place trophy will be awarded. How many different people can get the three prizes? $10! / 3!(10-3)! = 120$

236. There are 10 finalists for the school spelling bee. A first, second, and third place trophy will be awarded. In how many ways can the judges award the 3 prizes? $10! / (10-3)! = 720$

237. Time $(\text{distance}) / (\text{rate}) d/r$

238. To decrease a number by $x\%$ multiply by $1 - x\%$
 i.e. $100 \times (1 - 50\%) = 100 \times .5 = 50$

239. To increase a number by $x\%$ multiply by $1 + x\%$
 i.e. $100 \times (1 + 50\%) = 100 \times 1.5 = 150$

240. To multiply a number by 10^x move the decimal point to the right x places

241. A triangle is inscribed in a semi circle with legs 5 and 12. What is the circumference of the semicircle? $13\pi / 2$

242. True or false? $4.809 \times 10^7 = .0004809 \times 10^{11}$ True

243. Vertical lines Do not have slopes!

244. Volume of a cube edge^3

245. Volume of a rectangular box $V = Lwh$

246. Volume of a rectangular solid	(length)(width)(height)	264. What is a set with no members called?	the empty set, denoted by a circle with a diagonal through it.
247. What are "supplementary angles?"	Two angles whose sum is 180.	265. What is a subset?	a grouping of the members within a set based on a shared characteristic.
248. What are complementary angles?	Two angles whose sum is 90.	266. What is a tangent?	A tangent is a line that only touches one point on the circumference of a circle.
249. What are congruent triangles?	Triangles with same measure and same side lengths.	267. What is an arc of a circle?	An arc is a portion of a circumference of a circle.
250. What are the integers?	All numbers multiples of 1.	268. What is an exterior angle?	An angle which is supplementary to an interior angle.
251. What are the irrational numbers?	All real numbers which can't be expressed as a ratio of two integers, positive and negative (π , $-\sqrt{3}$)	269. What is an isosceles triangle?	Two equal sides and two equal angles.
252. What are the members or elements of a set?	The objects within a set.	270. What is it called when a point is reflected to the quadrant opposite it (i.e. I to III or II to IV)?	A reflection about the origin.
253. What are the rational numbers?	All numbers which can be expressed as a ratio of two integers. (All integers and fractions.) (-2, 1, .25, 1/2)	271. What is the "domain" of a function?	The set of input values for a function.
254. What are the real numbers?	All the numbers on the number line (negative, rational, irrational, decimal, integer). All the numbers on the GRE are real. (-2, 1, .25, 1/2, π)	272. What is the "range" of a function?	The set of output values for a function.
255. What are the roots of the quadrinomial $x^2 + 2x + 1$?	The two xes after factoring.	273. What is the "range" of a series of numbers?	The greatest value minus the smallest.
256. What are the smallest three prime numbers greater than 65?	67, 71, 73	274. What is the "solution" for a set of inequalities.	The overlapping sections.
257. What does scientific notation mean?	Expressing a number as the product of a decimal between 1 and 10, and a power of 10.	275. What is the "solution" for a system of linear equations?	The point of intersection of the systems.
258. What is a central angle?	A central angle is an angle formed by 2 radii.	276. What is the "union" of A and B?	The set of elements which can be found in either A or B.
259. What is a chord of a circle?	A chord is a line segment joining two points on a circle.	277. What is the area of a regular hexagon with side 6?	$54\sqrt{3}$. (divide the hexagon into 6 congruent equilateral triangles.)
260. What is a finite set?	A set with a number of elements which can be counted.	278. What is the coefficient of the x^2 term in the product of $(x + 1)(x + 2)(x - 1)$?	2
261. What is a major arc?	The longest arc between points A and B on a circle's diameter.	279. What is the common monomial factor in the expression $4(c^3)d - (c^2)(d^2) + 2cd$?	cd
262. What is a minor arc?	The shortest arc between points A and B on a circle's diameter.	280. What is the empty set?	A set with no members, denoted by a circle with a diagonal through it.
263. What is a percent?	A percent is a fraction whose denominator is 100.		

281. What is the graph of $f(x)$ shifted downward c units or spaces?	$f(x) - c$	298. What is the slope of a vertical line?	Undefined, because we can't divide by 0.
282. What is the graph of $f(x)$ shifted left c units or spaces?	$f(x + c)$	299. What is the sum of the angles of a triangle?	180 degrees
283. What is the graph of $f(x)$ shifted right c units or spaces?	$f(x - c)$	300. What is the surface area of a cylinder with radius 5 and height 8?	130π
284. What is the graph of $f(x)$ shifted upward c units or spaces?	$f(x) + c$	301. What is the third quartile of the following data set: 44, 58, 63, 63, 68, 70, 82	70
285. What is the intersection of A and B?	The set of elements found in both A and B.	302. What number between 70 & 75, inclusive, has the greatest number of factors?	72
286. What is the maximum value for the function $g(x) = (-2x^2) - 1$?	-1	303. What percent of 40 is 22?	55%
287. What is the measure of an exterior angle of a regular pentagon?	72	304. What transformation occurs if point C is reflected over the x-axis and then the y-axis?	A reflection about the axis.
288. What is the name for a grouping of the members within a set based on a shared characteristic?	A subset.	305. What's the difference between factors and multiples?	Factors are few, multiples are many.
289. What is the name of set with a number of elements which cannot be counted?	An infinite set.	306. When dividing exponential #s with the same base, you do this to the exponents...	Subtract them. i.e. $(5^7)/(5^3) = 5^4$
290. What is the order of operations?	PEMDAS (Parentheses Exponents Multiplication/Division Addition/Subtraction)	307. When does a function automatically have a restricted domain (2)?	When we need to avoid having a zero in the denominator or avoid taking the square root of a number.
291. What is the ratio of the sides of a 30-60-90 triangle?	1:sqrt3:2	308. When multiplying exponential #s with the same base, you do this to the exponents...	Add them. i.e. $(5^7) * (5^3) = 5^{10}$
292. What is the ratio of the sides of an isosceles right triangle?	1:1:sqrt2	309. Which is greater? 27^{-4} or 9^{-8}	27^{-4}
293. What is the ratio of the surface area of a cube with an edge of 10 to the surface area of a rectangular solid with dimensions 2, 4, and 6?	75:11	310. Which is greater? 64^5 or 16^8	16^8 $64^5 = (4^3)^5 = 4^{15}$ $16^8 = (4^2)^8 = 4^{16}$
294. What is the set of elements found in both A and B?	The intersection of A and B.	311. Which is greater? $200x^{295}$ or $10x^{294}$?	Relationship cannot be determined (what if x is negative?)
295. What is the set of elements which can be found in either A or B?	The union of A and B.	312. Write 10,843 X 10^7 in scientific notation	1.0843×10^{11}
296. What is the side length of an equilateral triangle with altitude 6?	$4\sqrt{3}$. The triangle can be divided into two equal 30-60-90 triangles with side 6 as the side in which $6 = x\sqrt{3}$. So $x = 2\sqrt{3}$...	313. X is the opposite of	-X
297. What is the slope of a horizontal line?	0	314. $x^2 = 9$. What is the value of x?	3, -3
		315. $x^4 + x^7 =$	$x^{(4+7)} = x^{11}$
		316. x^6 / x^3	$x^{(6-3)} = x^3$