

1 **What formula can you use to solve $x^2+3x+7=0$?**

- A The midpoint formula B The quadratic formula
C The distance formula D The slope formula

Source: Algebra 2, McDougal Littell. p 231

3 **What is the formula for the circumference of a circle?**

- A $2d$ B r^2
C d D 2

Source: <http://library.thinkquest.org/2647/geometry/measure/measure.htm>

5 **A square has one side that is six inches in length. What is the area of that square?**

- A 36 inches B 36 square inches
C 24 inches D 32 square inches

Source: Math On Call, Houghton Mifflin, p. 346

7 **Which of the following is a prime number?**

- A 19 B 18
C 15 D 12

Source: http://216.247.77.187/algebra/prime_list.html

2 **What type of angle has a measure greater than 90 degrees but less than 180 degrees?**

- A Obtuse B Right
C Total D Acute

Source: <http://library.thinkquest.org/2647/geometry/measure/measure.htm>

4 **If a triangle has an angle that is 45 degrees and a 2nd angle that is 90 degrees, what is the measure of the 3rd angle?**

- A 90 degrees B 45 degrees
C 60 degrees D 80 degrees

Source: Math On Call, Houghton Mifflin, p. 351

6 **What is the sum of 57 and 138, estimated to the nearest hundred?**

- A 200 B 250
C 300 D 350

Source: Math On Call, Houghton Mifflin, p.10

8 **Which one of the following is a factor of 28?**

- A 56 B 3
C 7 D 27

Source: Math On Call, Houghton Mifflin, p. 56

9 *What is the absolute value of -97?*

- A -97 B 97
C 197 D 19

Source: Math On Call, Houghton Mifflin, p. 51

10 *What is 3.4679 rounded to the nearest tenth?*

- A 3.45 B 3.468
C 3.5 D 3.4

Source: Math On Call, Houghton Mifflin, p. 10

11 *The fraction $\frac{4}{3}$ is equal to which of the following?*

- A 1.333 ... B 2
C 2.333 ... D 1.3

Source: Math On Call, Houghton Mifflin, p. 30

12 *What is the solution to $2x+4=8$?*

- A 2 B 4
C 8 D 6

Source: Algebra and Trigonometry, Addison Wesley

13 *What is the smallest number listed below?*

- A $\frac{3}{8}$ B $\frac{2}{4}$
C $\frac{7}{16}$ D $\frac{17}{32}$

Source: Algebra and Trigonometry, Addison Wesley

14 *If you multiply a real number by its inverse, the answer will always equal:*

- A 0 B 1
C 10 D 27.9

Source: Algebra and Trigonometry, Addison Wesley

15 *According to the distributive property, $a(b + c)$ is the same as:*

- A $2ab$ B $2a + 2b$
C $ab + ac$ D $ab - ac$

Source: Algebra and Trigonometry, Addison Wesley

16 *According to the addition property of equality, if $a = b$, then $a + c$ will equal:*

- A $a + b$ B $a - c$
C $b + c$ D $c - b$

Source: Algebra and Trigonometry, Addison Wesley

17 *If $a \times b = 0$, then which statement must be true?*

- A a is greater than b B a is a positive number
C Either a or b must equal 0 D Either a or b must equal 1

Source: Algebra and Trigonometry, Addison Wesley

19 *If $6x - 2 = 16$, then what does x equal?*

- A 3 B 4
C 5 D 6

Source: Algebra and Trigonometry, Addison Wesley

21 *If a basketball announcer declares that Magic Johnson did "a 180" on a driving lay-up, what has Magic done?*

- A Spun completely around B Spun $\frac{3}{4}$ of the way around
C Spun half way around D Missed the lay-up

Source: Algebra and Trigonometry, Addison Wesley

23 *What type of triangle has two sides of equal length?*

- A A trapezoid B An isosceles triangle
C A similar triangle D An obtuse triangle

Source: <http://library.thinkquest.org/2647/geometry/measure/measure.htm>

18 *The sum of two consecutive integers equals 35. How do you express this as an equation?*

- A $a + b = 35$ B $a \times b = 35$
C $a + (a+1) = 35$ D $a \times 1 = 35$

Source: Algebra and Trigonometry, Addison Wesley

20 *How many degrees are there in a right angle?*

- A 10 degrees B 45 degrees
C 90 degrees D 180 degrees

Source: Algebra and Trigonometry, Addison Wesley

22 *How many degrees are there in a semicircle?*

- A 90 degrees B 180 degrees
C 212 degrees D 360 degrees

Source: Algebra and Trigonometry, Addison Wesley

24 *If Rose walked three miles per hour for three hours, how far did she walk?*

- A 9 miles B 18 miles
C 3 miles D 6 miles

Source: <http://www.stfx.ca/special/math/problems/grade9.html>

25 *If a rectangle has a length of 7 units and a width of 5 units, what is its perimeter?*

- A 35 square units B 12 units
C 7 square units D 24 units

Source: Geometry, Prentice Hall, p. 244

26 *Which of the numbers below is greater than .716?*

- A .709 B .71
C .7 D .721

Source: Math On Call, Houghton Mifflin, p. 20

27 *$\frac{3}{5}$ can also be written as what percent?*

- A 20% B 40%
C 60% D 80%

Source: Algebra and Trigonometry, Addison Wesley

28 *What is 125% of 40?*

- A 32.34 B 40.25
C 44.60 D 50

Source: Algebra and Trigonometry, Addison Wesley

29 *What is the least common denominator of the fractions $\frac{1}{3}$, $\frac{2}{5}$, $\frac{4}{9}$, $\frac{8}{15}$?*

- A 15 B 35
C 45 D 60

Source: Algebra and Trigonometry, Addison Wesley

30 *In the fraction $\frac{3}{4}$, what is the 4 called?*

- A The numerator B The denominator
C The quotient D The integer

Source: Algebra and Trigonometry, Addison Wesley

31 *What does 2^4 equal?*

- A 4 B 2
C 16 D 8

Source: http://testprep.embark.com/sat/freeinfo/sat_sample_questions.asp

32 *What is the cube root of 64?*

- A 192 B 16
C 2 D 4

Source: http://testprep.embark.com/sat/freeinfo/sat_sample_questions.asp

33 *Two or more coplanar lines that have no points in common are called what?*

- A Perpendicular lines B Similar lines
C Parallel lines D Intersecting lines

Source: <http://library.thinkquest.org/2647/geometry/measurement/measure.htm>

35 *A line whose slope is zero is called a:*

- A Perpendicular line B Parallel line
C Horizontal line D Vertical line

Source: <http://library.thinkquest.org/2647/geometry/measurement/measure.htm>

37 *1,000,000 is 10 to what power?*

- A 2nd B 3rd
C 6th D 10th

Source: Algebra and Trigonometry, Addison Wesley

39 *What is the square root of 121?*

- A 21 B 11
C 11 or -11 D -11

Source: Algebra and Trigonometry, Addison Wesley

34 *What is the next number in the sequence:
1 2 4 7 11 ?*

- A 15 B 14
C 16 D 18

Source: Algebra 2, McDougal Littell, p. 659

36 *$ax^2 + bx + c = 0$ is an example of which type of equation?*

- A Simple equation B Quadratic equation
C Multiple equation D Linear equation

Source: Algebra To Go, Houghton Mifflin, p. 142

38 *The graph of any linear equation is:*

- A A parabola B An s-curve
C A straight line D A circle

Source: Algebra and Trigonometry, Addison Wesley

40 *Which one of the following is an imaginary number?*

- A Pi B The square root of 14
C The cube root of 27 D The square root of -47

Source: Algebra and Trigonometry, Addison Wesley

41 *What is the only number to have only one square root?*

- A -1 B 0
C 1 D 2

Source: Algebra and Trigonometry, Addison Wesley

42 *What ancient Greek is considered to be the father of geometry?*

- A Plato B Euclid
C Sophocles D Homer

Source: Algebra and Trigonometry, Addison Wesley

43 *What is the simplified form of $3y + 5x - 4x + 2y$?*

- A $7y + 7x$ B $-x + 7y$
C $x + 5y$ D $6xy$

Source: Study Guide, Algebra Section

44 *What is the name of an equality statement of 2 ratios (for example, $1/2 = 4/8$)?*

- A Rational expression B Inequality
C Random sample D Proportion

Source: Math On Call, Houghton Mifflin, p. 429

45 *If set $A = \{a, e, f, o, u\}$ and set $B = \{k, f, j\}$, what is the union of sets A and B?*

- A $\{h, f, j\}$ B $\{a, e, f, o, u, k, j\}$
C $\{f\}$ D $\{a, f, u\}$

Source: Math On Call, Houghton Mifflin, p.543

46 *Express 25,900 in scientific notation.*

- A 259×10^2 B 2.59×10^4
C 26,000 D 259×10^4

Source: Algebra 1, McGraw-Hill, p.506

47 *Points that lie on the same line are:*

- A Equidistant B A line segment
C A graph D Collinear

Source: Geometry, Prentice Hall, p.13

48 *The $\sqrt{6}$ is between what two whole numbers?*

- A 5 and 7 B 2 and 3
C 3 and 4 D 4 and 9

Source: Algebra 1, McDougal Littell, p.524

49 *In which quadrant of the coordinate plane is the ordered pair (-4, 2)?*

- A I B II
C III D IV

Source: Algebra 1, McGraw-Hill, p.254

51 *Find the product $(x+1)(2x-1)$.*

- A $3x$ B $2x^2 + x - 1$
C $3x^2 - 1$ D $2x^2 - 1$

Source: Algebra 1, McGraw-Hill, p.537

53 *In statistics, what is a smooth, symmetrical, bell shaped curve called?*

- A Elliptical curve B Normal curve
C Parabolic curve D Sine curve

Source: Algebra 2, McDougal Littell, p.746

55 *The quadratic formula is used to solve equations whose graphs are:*

- A Circles B Lines
C Hyperbolas D Parabolas

Source: Algebra 1, McGraw-Hill, p.610

50 *Which of the following is not a statistical graph?*

- A Box-and-whisker plot B Bar graph
C Sine curve D Circle graph

Source: Algebra 2, McDougal Littell, p.447

52 *If a six sided die is tossed, what is the probability of not tossing a 6?*

- A 0 B $3/6$
C $5/6$ D $1/6$

Source: Algebra 2, McDougal Littell, p.726

54 *What is the domain of the set of ordered pairs (-1,3), (0,-2), and (4,2)?*

- A 3, -2, 2 B 2, -2, 2
C -1, 0, 4 D 3,3

Source: Algebra 1, McGraw-Hill, p.26

56 *What is the excluded value for the expression $(4x - 1) / (x + 3)$?*

- A $x = -3$ B $x = 3$ or $x = -3$
C $x = 1/4$ D None

Source: Algebra 1, McGraw-Hill, p.660

57 What is a simpler form of $(X^3)^6$ =

- A x^9 B $6x^3$
C x^6 D x^{18}

Source: Study Guide, Algebra 1 Section

59 The range of the set of data 1, 6, 4, 9, 8, 2 is:

- A 5 B 10
C 8 D 9

Source: Algebra 1, McGraw-Hill, p.306

61 If two angles are both congruent and supplementary, then what kind of angles are they?

- A Obtuse B Acute
C Right D Isosceles

Source: Geometry, Prentice Hall, p.195

63 What is the complement of a 60 degree angle?

- A 60 degrees B 30 degrees
C 120 degrees D A nice statement

Source: Geometry, Prentice Hall, p.48

58 What tool is used to measure an angle?

- A Ruler B Watch
C Protractor D Compass

Source: Math On Call, Houghton Mifflin, p.328

60 If the letters of the word probability are randomly chosen, what is the probability of choosing an "i" ?

- A 100% B $2/11$
C 50% D $11/2$

Source: Algebra 1, McGraw-Hill, p.228

62 Two lines with the same slope are:

- A Congruent B Vertical
C Parallel D Perpendicular

Source: Geometry, Prentice Hall, p.85

64 What is the mean for the set of data 2, 5, 7, 2, 4 ?

- A 7 B 2
C 1 D 4

Source: Algebra 1, McGraw-Hill, p.178

65 **What is the midpoint of a segment connecting (2, 3) to (4, 5) ?**

- A (5, 6) B (3, 2)
C (4, 7.5) D (3, 4)

Source: Study Guide, Algebra 2 Section

66 **What is the range of probabilities of any event?**

- A Between 0 and 100 B Between 0 and 1
C Between 1 and 100 D Between 0 and infinity

Source: Algebra 2, McDougal Littell, p.716

67 **What is the area of a triangle that has a height of 2 units and a base of 6 units?**

- A 3 square units B 3 units
C 6 square units D $3/2$ square units

Source: Algebra 1, McGraw-Hill, p.24

68 **The slope of a line is defined as:**

- A Steep B Run/Rise
C Horizontal change/Vertical change D Vertical change/Horizontal change

Source: Algebra 1, McGraw-Hill, p.325

69 **What kind of line has an undefined slope?**

- A Vertical B Curved
C Straight D Horizontal

Source: Algebra To Go, Houghton Mifflin, p.160

70 **The "FOIL" method would be used to find which of the following products?**

- A $(x - 4)(2x + 3)$ B $5(2x - 1)(x)$
C $(x - 4)(2x^2 + x - 1)$ D $3x^2y(2x^5y^4)$

Source: Algebra 1, McGraw-Hill, p.537

71 **Complete: The sum of the lengths of the two shorter sides of a triangle is _____ the length of the third side.**

- A Greater than B Less than
C Equal to D Less than or equal to

Source: Geometry, Prentice Hall, p.214

72 **Which quadrilateral cannot contain 4 right angles?**

- A A trapezoid B A rectangle
C A parallelogram D A rhombus

Source: Geometry, Prentice Hall, p.239

73 *If two parallel lines are cut by a transversal, then which angles are not congruent?*

- A Alternate interior B Vertical
C Corresponding D Same-side interior

Source: Geometry, Prentice Hall, p.364

75 *What is the next number in the sequence 5, -15, 45, ?*

- A 90 B 135
C -135 D -90

Source: Study Guide, Algebra 2 section

77 *With which unit would you measure temperature?*

- A Meter B Liter
C Kilogram D Degrees Celsius

Source: Algebra 2, McDougal Littell, p.962

79 *Which statement is true?*

- A $-2 - 1 > -2(-1)$ B $-2 - 1 < -2(-1)$
C $-2 - 1 = -2(-1)$ D $-2 - 1 = -2(-1)$

Source: Algebra 1, McGraw-Hill, p.139

74 *Complete: _____ means that you make a prediction by extending a graph beyond the range of data you already have.*

- A Interpolation B Completing the square
C Extrapolation D Rationalizing the denominator

Source: Math On Call, Houghton Mifflin, p.311

76 *Which of these is NOT an approximation for pi?*

- A $22/7$ B 2
C 3.14 D Circumference/diameter

Source: Geometry, Prentice Hall, p.279

78 *In a circle with radius r , diameter d and circumference C , how is pi found?*

- A $2r$ B d/C
C C/d D r/d

Source: Math On Call, Houghton Mifflin, p.373

80 *Name the following sequence of numbers:
1 1 2 3 5 8 13*

- A Factorial B Arithmetic
C Fibonacci D Power

Source: Algebra 2, McDougal Littell, p.687

81 *A rhombus can never be a:*

- A Rectangle
- B Square
- C Parallelogram
- D Circle

Source: Geometry, Prentice Hall, p.92

83 *In geometry, an accepted statement of truth is called a:*

- A Postulate
- B Proof
- C Theorem
- D Formula

Source: Geometry, Prentice Hall, p.14

85 *Evaluate 4 factorial (4!).*

- A $4^2 = 16$
- B $(4)(3)(2)(1) = 24$
- C Excited 4
- D $1/4$

Source: Algebra 2, McDougal Littell, p.681

87 *To subtract an integer, add its:*

- A Positive
- B Reciprocal
- C Opposite
- D Prime

Source: Math On Call, Houghton Mifflin, p.136

82 *An angle is formed by two:*

- A Degrees
- B Segments
- C Lines
- D Rays

Source: Geometry, Prentice Hall, p.26

84 *Name the side opposite the right angle in a right triangle.*

- A Hypothesis
- B Hypotenuse
- C Leg
- D Hippopotamus

Source: Geometry, Prentice Hall, p.256

86 *What is the slope of the line that passes through the points (2,5) and (4,6)?*

- A 2
- B $6/11$
- C $11/6$
- D $1/2$

Source: Algebra 1, McGraw-Hill, p.326

88 *The number 1 is:*

- A Prime
- B Composite
- C Neither prime nor composite
- D Irrational

Source: Math On Call, Houghton Mifflin, p.59

89 *What is the solution of $-2x < 4$*

- A $x = 2$ B $x < 2$
C $x < -2$ D $x > -2$

Source: Algebra To Go, Houghton Mifflin, p.196

91 *What is the name of a line segment with both direction and magnitude?*

- A Vector B Matrix
C Tangent D Diameter

Source: Trigonometry, Harcourt Brace, p.188

93 *In the graph of $y = 3x + 2$, what is the y-intercept?*

- A 2 B 3
C $\frac{2}{3}$ D $\frac{1}{2}$

Source: Algebra 1, McGraw-Hill, p.347

95 *What are arrangements of things in a definite order?*

- A Permutations B Combinations
C Logarithms D Palindromes

Source: Algebra 2, McDougal Littell, p.708

90 *In the phrase, "Two-thirds of 12 is 8," what math operation does the word "of" stand for?*

- A Addition B Multiplication
C Ratio D Division

Source: Algebra To Go, Houghton Mifflin, p.89

92 *Which of the following would be the best unit to measure the mass of a person?*

- A Milligram B Gram
C Kilogram D Metric ton

Source: Algebra To Go, Houghton Mifflin, p.762

94 *If $x = -1$, then what is $2x^3 - 3x^2 + 1$?*

- A -4 B 4
C 2 D 1

Source: Algebra 1, McGraw-Hill, p.55

96 *Complete: An equilateral triangle is _____ a right triangle.*

- A Always B Sometimes
C Never D Rarely

Source: Algebra To Go, Houghton Mifflin, p.244

97 **Complete:** *The lateral faces of a prism are _____ rectangles.*

- A Always B Sometimes
C Never D Rarely

Source: Geometry, Prentice Hall, p.316

99 **Name the diagram that shows relationships among sets of objects.**

- A Venn B Polygon
C Intersection D Pythagorean

Source: Algebra To Go, Houghton Mifflin, p.363

101 **A function is a set of ordered pairs of numbers, x and y , such that for every:**

- A x , there are many y 's B y , there are no x 's
C y , there is exactly one x D x , there is exactly one y

Source: Algebra 1, McGraw-Hill, p.287

103 **Which of the following is an algebraic expression that represents "eight decreased by the product of x and 2"?**

- A $(x + 2) - 8$ B $2x - 8$
C $-16x$ D $8 - 2x$

Source: Algebra 1, McGraw-Hill, p.139

98 **Assuming there are no ties, in how many different ways can 3 runners finish a race?**

- A 3 B 9
C 6 D 1

Source: Algebra 2, McDougal Littell, p.703

100 **The sum of the measures of the angles of a rectangle is the same as the number of degrees in a:**

- A Circle B Semicircle
C Polyhedron D Pentagon

Source: Geometry, Prentice Hall, p.97

102 **What does 7^0 (7 to the zero power) equal?**

- A 0 B 7
C 1 D Undefined

Source: Algebra 1, McGraw-Hill, p.502

104 **In the ordered pair (2,3), the 2 is the:**

- A Ordinate B X-coordinate
C Y-coordinate D 1st quadrant

Source: Algebra 1, McGraw-Hill, p.254

105 *The graph of an exponential function is always a:*

- A Line B Circle
C Curve D Parabola

Source: Algebra 1, McGraw-Hill, p.634

107 *Which of the following is an algebraic expression for “three less than the sum of four and a number n ”?*

- A $(4 + n) - 3$ B $3 - 4n$
C $3 - (4 + n)$ D $4n - 3$

Source: Algebra 1, McGraw-Hill, p.7

109 *The number $x + 6$ is how much greater than $x - 2$?*

- A 4 B $x - 8$
C 8 D $x + 4$

Source: Algebra 1, McGraw-Hill, p.277

111 *What tool is used to draw a circle?*

- A Compass B Protractor
C Straightedge D Gear

Source: Geometry, Prentice Hall, p.39

106 *Which of these expressions is a trinomial?*

- A $4x^2 - 3x + 2$ B $2x^4y^2$
C $2x - 1$ D x^2y^2

Source: Algebra 1, McGraw-Hill, p.514

108 *Is the graph of a circle a function?*

- A Always B Sometimes
C Never D Rarely

Source: Algebra 1, McGraw-Hill, p.289

110 *What is the factored form of $a^2 - b^2$?*

- A $a^2 + 2ab + b^2$ B $(a + b)(a - b)$
C $a^2 + 2ab - b^2$ D $(a - b)(a - b)$

Source: Algebra 1, McGraw-Hill, p.582

112 *In geometry, what is a net?*

- A A pattern for a 3-D figure B Something to catch fish
C A proof D Something to surf

Source: Geometry, Prentice Hall, p.302

113 *In transformational geometry, a flip is also known as a:*

- A Reflection B Turn
C Slide D Fractal

Source: Geometry, Prentice Hall, p.125

115 *Solve $(2/5)x = -10$.*

- A $x = -4$ B $x = -25$
C $x = 4$ D $x = -10$

Source: Algebra 1, McGraw-Hill, p.153

117 *What is the factored form of the trinomial $b^2 + 7b + 12$?*

- A $(b + 6)(b + 1)$ B $7(12)b(b^2)$
C $(b + 3)(b + 4)$ D $(b + 7)^2$

Source: Algebra 1, McGraw-Hill, p.574

119 *The graphs of the equations $y = (2/3)x - 1$ and $y = (-3/2)x - 1$ are:*

- A Parallel B Perpendicular
C Parallel & perpendicular D Oblique

Source: Algebra 1, McGraw-Hill, p.365

114 *What is the prime factorization of 36?*

- A $2(18)$ B $2^2(3^2)$
C 6^2 D $2(2)(9)$

Source: Algebra 1, McGraw-Hill, p.558

116 *If $9/x = 3/4$, what does x equal?*

- A 10 B 11
C 108 D 12

Source: Geometry, Prentice Hall, p.497

118 *Simplify $7a^6/a^4$.*

- A $6a^2$ B $7a^6a^4$
C $7a^{24}$ D $7a^2$

Source: Algebra 1, McGraw-Hill, p.501

120 *Which ordered pair is the center of the circle whose equation is $(x + 7)^2 + (y - 5)^2 = 16$?*

- A $(-7,5)$ B $(7,-5)$
C $(4,4)$ D Not enough information

Source: Geometry, Prentice Hall, p.586

121 *What kind of variation do the x and y in the equation $x = 3/y$ show?*

- A Inverse
- B Parallel
- C Direct
- D Joint

Source: Algebra 2, McDougal Littell, p.536

123 *What is the length of the hypotenuse of a right triangle with legs of 6 cm and 8 cm?*

- A 9 cm
- B 100 cm
- C 196 cm
- D 10 cm

Source: Geometry, Prentice Hall, p.257

125 *What is the factored form of $2x^2 + 10x$?*

- A $2(x^2 + 5)$
- B $2x(x + 5)$
- C $2x^2(1 + 5x)$
- D $12x^2$

Source: Algebra 2, McDougal Littell, p.257

127 *How many diagonals does a pentagon have?*

- A 6
- B Infinite number
- C 5
- D 0

Source: Algebra 1, McGraw-Hill, p.13

122 *Which of the following is NOT a conic section?*

- A Ellipse
- B Circle
- C Parabola
- D Line

Source: Algebra 2, McDougal Littell, p.622

124 *What is the volume of a rectangular prism with dimensions 3 cm by 5 cm by 1 cm?*

- A Not enough information
- B 15 cm^3
- C 9 cm^3
- D 15 cm^2

Source: Geometry, Prentice Hall, p.324

126 *A number is divisible by 6 if it is:*

- A Prime
- B Divisible by 2 & by 3
- C Even
- D A factor of 6

Source: Math On Call, Houghton Mifflin, p.69

128 *What is a triangle that has an angle that measures between 90 degrees and 180 degrees called?*

- A Isosceles
- B Scalene
- C Acute
- D Obtuse

Source: Geometry, Prentice Hall, p.71

129 *If two planes intersect, they intersect in a:*

- A Point
- B Plane
- C Line segment
- D Line

Source: Geometry, Prentice Hall, p.14

131 *In what kind of units is area measured?*

- A Metric
- B Square
- C Linear
- D Cubic

Source: Geometry, Prentice Hall, p.324

133 *In plane geometry, vertical angles are:*

- A Adjacent
- B Inscribed
- C Congruent
- D Tangent

Source: Geometry, Prentice Hall, p.48

135 *What is another word for "tiling"?*

- A Fractal
- B Matching
- C Transforming
- D Tessellating

Source: Geometry, Prentice Hall, p.159

130 *Which of these relates the number of faces, vertices and edges of any polyhedron (geometric solid)?*

- A Dimensional analysis
- B Euler's formula
- C Volume formula
- D Goldbach's conjecture

Source: Geometry, Prentice Hall, p.303

132 *Which of the following can NOT be the perimeter of an equilateral triangle with integer side lengths?*

- A 24 m
- B 16 m
- C 9 m
- D 12 m

Source: Geometry, Prentice Hall, p.299

134 *Which of the following is NOT a figurate number?*

- A Triangular
- B Square
- C Pentagonal
- D Variable

Source: Algebra 2, McDougal Littell, p.380

136 *What is the multiplicative inverse of $-5/7$?*

- A $7/5$
- B $-2 \frac{2}{7}$
- C $5/7$
- D $-7/5$

Source: Algebra 1, McGraw-Hill, p.39

137 *How many different outfits can be made with 3 colors of pants, 4 colors of shirts and 2 kinds of shoes?*

- A 24 B As many as you want
C 3 D 9

Source: Algebra 2, McDougal Littell, p.701

138 *If the area of a parallelogram is 24 cm^2 and its height is 6 cm, what is the length of its base?*

- A 144 cm B 15 cm
C 18 cm D 4 cm

Source: Geometry, Prentice Hall, p.252

139 *What kind of number is the square root of 2?*

- A Complex B Irrational
C Rational D Imaginary

Source: Algebra 1, McGraw-Hill, p.120

140 *If the perimeter of a rectangle is 10 units and its area is 6 square units, what are its dimensions?*

- A 1 by 6 units B 2 by 3 units
C 2 by 5 units D 6 by 10 units

Source: Geometry, Prentice Hall, p.244

141 *What is the fourth root of 16?*

- A 2 B 4 and -4
C 4 D 2 and -2

Source: Algebra 2, McDougal Littell, p.401

142 *Complete: A fraction with a numerator of 1 is a/an _____ fraction.*

- A Improper B Prime
C Decimal D Unit

Source: Math On Call, Houghton Mifflin, p.595

143 *What is the area of a circle with a radius of 5 cm?*

- A 5 cm B 25 cm
C 10 cm D 25 cm^2

Source: Geometry, Prentice Hall, p.279

144 *In a regular polygon, which of the following are congruent?*

- A The areas B The volumes
C The perimeters D The angles

Source: Geometry, Prentice Hall, p.78

145 *What kind of symmetry does the letter "A" have?*

- A Rotational
- B Translational
- C Line
- D Point

Source: Geometry, Prentice Hall, p.157

147 *Zero is not a member of which number set?*

- A Integers
- B Natural numbers
- C Rational numbers
- D Whole numbers

Source: Algebra 1, McGraw-Hill, p.73

149 *A scalene triangle cannot be:*

- A Right
- B Obtuse
- C Isosceles
- D Acute

Source: Math On Call, Houghton Mifflin, p.353

151 *Which sequence below represents the powers of 2?*

- A 2 4 6 8 10 ...
- B 1 2 4 6 8 ...
- C 1 2 4 8 16 ...
- D 1

Source: Algebra 1, McGraw-Hill, p.497

146 *Complete: An irrational number can _____ be represented by a ratio of two integers.*

- A Always
- B Sometimes
- C Never
- D Rarely

Source: Math On Call, Houghton Mifflin, p. 52

148 *In a scalene triangle, how many sides are congruent?*

- A 2
- B 3
- C 4
- D 0

Source: Math On Call, Houghton Mifflin, p.352

150 *Complete: If 2 lines are cut by a transversal, the _____ angles are on opposite sides of the transversal and on the inside of the lines it intersects.*

- A Corresponding
- B Alternate interior
- C Alternate exterior
- D Vertical

Source: Math on Call, Houghton Mifflin, p.338

152 *What is the name of the segment from a vertex of a triangle to the midpoint of the opposite side?*

- A Perpendicular bisector
- B Diameter
- C Altitude
- D Median

Source: Geometry, Prentice Hall, p.229

153 Which one of the following is NOT a Platonic solid?

- A Octahedron B Cube
C Sphere D Tetrahedron

Source: Geometry, Prentice Hall, p. 305

155 Simplify $\sqrt{18}$.

- A 9 B $3\sqrt{2}$
C $9\sqrt{2}$ D None of these

Source: Algebra 1, McGraw-Hill, p.719

157 Evaluate $-12 - (-8)$.

- A -96 B -4
C 4 D -20

Source: Algebra 1, McGraw-Hill, p.88

159 How does a 100% increase compare to the original amount?

- A Twice the original amount B $1\frac{1}{2}$ times the original amount
C 4 times the original amount D The same as the original amount

Source: Math On Call, Houghton Mifflin, p.447

154 What is the coefficient of the expression $6a^2b^5c$?

- A 6 B 13
C abc D 60

Source: Algebra 1, McGraw-Hill, p.47

156 Which of the following sets of numbers is a Pythagorean triple?

- A 3,4,5 B 1,4,9
C 3,6,9 D 1,8,27

Source: Algebra 1, McGraw-Hill, p.583

158 A fractal is a geometric figure that is:

- A Congruent B Isometric
C Self-similar D Corresponding

Source: Geometry, Prentice Hall, p.106

160 How does the volume of a cone compare to the volume of a cylinder with the same base and height?

- A The same as B $\frac{1}{2}$ as much as
C $\frac{1}{3}$ as much as D Twice as much as

Source: Geometry, Prentice Hall, p.332

161 Simplify $(2x^4)^3$.

- A $8x^{12}$ B $6x^{12}$
C $2x^7$ D $8x^7$

Source: Algebra 1, McGraw-Hill, p.498

163 Complete: reciprocal numbers multiply to equal _____

- A 0 B 1
C -1 D 10

Source: Algebra 1, McDougal Littel

165 What is another word for the "corners" of a solid figure?

- A Faces B Vertices
C Axes D Edges

Source: Math On Call, Houghton Mifflin, p.393

167 Evaluate: $3/4 \div 3/8$.

- A $32/9$ B 2
C $1/2$ D $9/32$

Source: Algebra To Go, Houghton Mifflin, p.90

162 What is the expanded form of $(x + 4)^2$?

- A $x^2 + 8$ B $x^2 + 16$
C $x^2 + 4x + 16$ D $x^2 + 8x + 16$

Source: Algebra 2, McDougal Littel, p. 113

164 Complete: The faces of a polyhedron are _____ polygons.

- A Always B Sometimes
C Never D Rarely

Source: Math On Call, Houghton Mifflin, p.394

166 In a fraction, what operation does the fraction bar indicate?

- A Addition B Subtraction
C Division D Multiplication

Source: Algebra 1, McGraw-Hill, p.113

168 If a triangle is a right triangle, then the two smaller angles are what?

- A Congruent B Complementary
C Obtuse D Right

Source: Geometry, Prentice Hall, p.195

169 A square is _____ a parallelogram.

- A Always
- B Sometimes
- C Never
- D Rarely

Source: Geometry, Prentice Hall, p.91

170 What is the surface area of a cube whose edges each have a length of 1 meter?

- A $6m^2$
- B $1m^2$
- C $4m^2$
- D Not enough information

Source: Geometry, Prentice Hall, p.309

171 $2 + 4 \cdot 5 - 7 =$

- A 15
- B 33
- C 23
- D -23

Source: Algebra 1 McDougal Littell, p.17

172 How many faces does a icosahedron have?

- A 10
- B 6
- C 20
- D 12

Source: Geometry, Prentice Hall, p.76

173 Who is the father of the most well known theorem dealing with right triangles?

- A Eratosthenes
- B Archimedes
- C Descartes
- D Pythagoras

Source: Geometry, Prentice Hall, p.259

174 Complete: A polyhedron is a _____ - dimensional figure with faces that are polygons.

- A 1
- B 2
- C 3
- D 4

Source: Math On Call, Houghton Mifflin, p.394

175 How many and what type of faces does an octahedron have?

- A 6 squares
- B 3 equilateral triangles
- C 8 equilateral triangles
- D 4 squares

Source: Geometry, Prentice Hall, p.303

176 What type of reasoning enables you to reach conclusions based on a pattern of specific examples?

- A Inductive
- B Deductive
- C Postulate
- D Proof

Source: Geometry, Prentice Hall, p.5

177 *In trigonometry, angles can be measured in degrees or in:*

- A Square units B Centimeters
C Radians D Arcs

Source: Algebra 2, McDougal Littell, p.777

178 *Simplify $(4x^5)(x^3)$.*

- A $5x^8$ B $4x^{15}$
C $4x^8$ D $5x^{15}$

Source: Algebra 1, McGraw-Hill, p.497

179 *Corresponding sides of similar polygons are:*

- A Perpendicular B Equivalent
C Congruent D Proportional

Source: Algebra To Go, Houghton Mifflin, p.259

180 *In the graph of $y = 2x + 3$, what is the slope?*

- A 2 B 3
C $2/3$ D $1/2$

Source: Algebra 1, McGraw-Hill, p.347

181 *What are the finite differences of the sequence 1 3 5 7 9 ... ?*

- A 2 2 2 2 ... B The odd numbers
C $2n - 1$ D 1

Source: Algebra 2, McDougal Littell, p.379

182 *What is the next term in the sequence 3 6 12 24 ... ?*

- A 30 B 48
C 12 D 36

Source: Algebra 1, McGraw-Hill, p.13

183 *What is the expanded form of $2x(3x^2 + 5)$*

- A $6x^3 + 5$ B $6x^3 + 10x$
C $6x^2 + 10x$ D $2x + 3x^2 + 5$

Source: Algebra 1, McDougal Littell, p. 104

184 *What is the log of 32 to the base 2?*

- A 32 B 2
C 5 D 10

Source: Algebra 2, McDougal Littell, p.486

185 Assuming you have an equally likely chance of choosing any integer from 1 through 20, what is the probability of choosing a perfect square?

- A $\frac{4}{20}$ B $\frac{1}{4}$
C 0 D $\frac{4}{10}$

Source: Algebra 2, McDougal Littell, p.719

187 Which of the following is NOT a palindrome?

- A radar B 1234
C 12321 D 66

Source: Critical Thinking Skills, Frank Staffer, p.1

189 Evaluate $10 - 2(3) + 1$.

- A 32 B 5
C 3 D 25

Source: Algebra 1, McGraw-Hill, p.19

191 Who, at the age of 10, mentally added the numbers from 1 to 100 almost immediately?

- A Leonard Euler B Karl Friedrich Gauss
C Fibonacci D John Napier

Source: Algebra 2, McDougal Littell, p.661

186 Simplify the expression $3x^2 + 2x + x + 2x^2$.

- A $8x^3$ B $5x^2 + 3x$
C $8x^6$ D $6x^2 + 2x$

Source: Algebra 1, McGraw-Hill, p.48

188 Two lines that intersect to form right angles are:

- A Complementary B Parallel
C Vertical D Perpendicular

Source: Geometry, Prentice Hall, p.33

190 What is the name of a fraction that contains a fraction in its numerator or denominator?

- A Logarithmic fraction B Rational fraction
C Complex fraction D Simplified fraction

Source: Algebra 2, McDougal Littell, p.564

192 What Hindu-Arabic number is the Roman numeral CXIV?

- A 64 B 44
C 66 D 114

Source: Math On Call, Houghton Mifflin, p.554

193 **Complete:** *In algebra, a relation is _____ a function.*

- A Always
- B Sometimes
- C Never
- D Correspondingly

Source: Math On Call, Houghton Mifflin, p.234

194 **A square and a rectangle have the same area. If the rectangle is 1 cm by 4 cm, what are the dimensions of the square?**

- A 2 cm² by 2 cm²
- B 8 cm
- C 2 cm by 2 cm
- D 1 cm by 4 cm

Source: Geometry, Prentice Hall, p.246

195 **How many millimeters are in a kilometer?**

- A 1,000,000
- B 1,000
- C 10,000
- D 100

Source: Algebra 2, McDougal Littill, p. 962

196 **What does $-6(-3)$ equal?**

- A -18
- B 18
- C -9
- D -3

Source: Algebra 1, McGraw-Hill, p.105

197 **Evaluate $\frac{(0.3 + 0.3 + 0.3 + 0.3)}{4}$.**

- A 0.03
- B 1
- C 1.2
- D 0.3

Source: Algebra 1, McGraw-Hill, p.43

198 **How many vertices does a cube have?**

- A 1
- B 4
- C 6
- D 8

Source: Geometry, Prentice Hall, p.305

199 **Find the number of combinations of 5 things taken 2 at a time.**

- A 20
- B 7
- C 25
- D 10

Source: Algebra 2, McDougal Littell, p. 708

200 **What is the multiplication of a matrix by a real number called?**

- A Linear multiplication
- B Scalar multiplication
- C Integer multiplication
- D Logarithmic multiplication

Source: Algebra 2, McDougal Littell, p. 200

201 Complete: The sum of a positive integer and a negative integer is _____ negative.

- A Always
- B Sometimes
- C Never
- D Positively

Source: Math On Call, Houghton Mifflin, p.108

202 The mode for the set of data 2, 5, 1, 2, 4 is

- A 2
- B 4
- C 5
- D 7

Source: Algebra 1, Mcgraw-Hill, p. 179

203 Find the product of $(a + b)(a - b)$.

- A $a^2 - b^2$
- B $a^2 + 2ab - b^2$
- C $a^2 - 2ab + b^2$
- D $a^2 - 2ab - b^2$

Source: Algebra 1, Mcgraw-Hill, p. 545

204 If $12/3 = x$, then $3x + 1$ is

- A 13
- B 3
- C 4
- D 12

Source: Algebra 1, Mcgraw-Hill, p. 50

205 Which of the following is NOT a problem-solving strategy?

- A Look for a pattern
- B Draw a diagram
- C Guess and check
- D Use the distributive property

Source: Algebra To Go, Houghton Mifflin, p.376

206 Which of the following is NOT an application of Pascal's triangle?

- A Binomial theorem
- B Combinations
- C Probability
- D Parabolas

Source: Algebra 1, Mcgraw-Hill, p. 710

207 What is the midpoint of a line segment with endpoints $(-3, 6)$ and $(-5, 9)$?

- A $(-8, 15)$
- B $(-4, 7.5)$
- C $-3/2$
- D $(2, -3)$

Source: Study Guide, Algebra 1 Section

208 Name the point $(0, 0)$ in the coordinate grid.

- A Ordinate
- B Abscissa
- C Origin
- D Quadrant

Source: Algebra To Go, Houghton Mifflin, p.219

209 *If the side adjacent to one of the acute angles of a right triangle has length 3, the side opposite that same angle has length 4, and the hypotenuse a length 5, what is the sine of that acute angle?*

- A $\frac{\text{adjacent}}{\text{hypotenuse}} = \frac{3}{5}$ B $\frac{\text{opposite}}{\text{adjacent}} = \frac{4}{3}$
 C $\frac{\text{opposite}}{\text{hypotenuse}} = \frac{4}{5}$ D $\frac{\text{hypotenuse}}{\text{opposite}} = \frac{4}{5}$

Source: Algebra 2, McDougal Littell, p. 769

211 *Solve $c = 2\pi r$ for r .*

- A $r = \frac{2}{c}$ B $r = \frac{c}{2}$
 C $r = 2c$ D $r = \frac{2c}{c}$

Source: Algebra 2, McDougal Littell, p. 62

213 *The probability of picking a red sphere out of a bag containing 4 blue, 1 yellow, and 3 red spheres is:*

- A $\frac{3}{8}$ B $\frac{5}{8}$
 C $\frac{8}{3}$ D $\frac{1}{2}$

Source: Algebra To Go, Houghton Mifflin, p.322

215 *In the complex number $a + bi$, what is i equal to?*

- A $i = 1$ B i is any real number
 C $i = -1$ D $i = -i$

Source: Algebra 2, McDougal Littell, p. 272

210 *In a subtraction problem, what is the answer called?*

- A Difference B Product
 C Minuend D Subtrahend

Source: Math On Call, Houghton Mifflin, p.115

212 *The degree of the polynomial function $f(x) = 2x^3 - x^2 + 4x + 1$ is:*

- A 2 B 1
 C 6 D 3

Source: Algebra 2, McDougal Littell, p. 329

214 *If a coin is tossed twice, what is the probability that it will land heads on both tosses?*

- A 2 B $\frac{1}{2} + \frac{1}{2} = 1$
 C $\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4}$ D 0

Source: Algebra 2, McDougal Littell, p. 730

216 *Find the value of c that makes $x^2 + 12x + c$ a perfect square trinomial.*

- A 24 B 2 3
 C 36 D 144

Source: Algebra 2, McDougal Littell, p. 286

217 *What kind of sequence of numbers is 4, 7, 10, 13, 16...?*

- A** Geometric **B** Arithmetic
C Power **D** Hyperbolic

Source: Algebra 2, McDougal Littel, p. 659

219 *What are the factors of 36?*

- A** $1 + 36$ **B** 36
C $4 \cdot 9$ and $6 \cdot 6$ **D** 1, 2, 3, 4, 6, 9, 12, 18, 36

Source: Algebra 1, Mcgraw-Hill, p. 380

221 *What is the graph of the function $y = 1/x$?*

- A** Hyperbola **B** Parallel lines
C Parabola **D** Circle

Source: Algebra 2, McDougal Littel, p. 540

223 *If $f(x) = 3x - 1$, what is $f(1)$?*

- A** -4 **B** $3x - 1$
C 1 **D** 2

Source: Algebra 2, McDougal Littel, p. 69

218 *Which is NOT a method for solving a SYSTEM of equations?*

- A** Combinatronics **B** Substitution
C Linear Combination **D** Graphing

Source: Algebra 2, McDougal Littel, p. 139, 148

220 *Parallel lines have the same:*

- A** y - intercept **B** x - intercept
C Origin **D** Slope

Source: Algebra 1, Mcgraw-Hill, p. 362

222 *What does $2^3 \cdot 2^0 \cdot 2^2$ equal?*

- A** 0 **B** 32
C 64 **D** 1

Source: Algebra 2, McDougal Littel, p. 323

224 *Complete: A line with _____ slope rises from left to right.*

- A** Undefined **B** Negative
C Positive **D** Zero

Source: Algebra 2, McDougal Littel, p. 76

225 If Jerome walked 48 miles in 4 days what was his average speed?

- A 48 mi/day B 192 mi.days
C 12 mi/hr D 12 mi/day

Source: Algebra 2, McDougal Littel p. 183

226 Solve $-x + 2 > 5$.

- A $x < -3$ B $-x > 3$
C $x > -3$ D $x < 7$

Source: Algebra 2, McDougal Littel, p. 41

227 Complete: The sum of an even number and an odd number is _____ an odd number.

- A Always B Sometimes
C Never D Approximately

Source: Math On Call, Houghton Mifflin, p.55

228 Evaluate 2^3 .

- A $2 + 2 + 2$ B 9
C 8 D 6

Source: Algebra 1, Mcgraw-Hill, p. 8

229 What is the median of the following data: 2, 4, 6, 8, 10

- A 6 B 8
C 7 D 10

Source: algebra 1, McDougal Littel, p 369

230 If a fair die whose sides are numbered 1-6 is rolled, what is the probability of rolling an odd number?

- A 3 B $3/5$
C 5 D $1/2$

Source: Algebra 2, McDougal Littel, p. 716

231 Complete: In trigonometry, the tangent of an acute angle of a right triangle (in terms of lengths of sides) is _____ .

- A opposite
adjacent B adjacent
hypotenuse
C opposite
hypotenuse D hypotenuse
opposite

Source: Algebra 2, McDougal Littel, p. 769

232 If M is the midpoint of line segment AB, which of these is NOT true?

- A Segments AM and MB are congruent B $AM + MB = AB$
C $AB = 2AM$ D Rays AM and AB are opposite rays

Source: Geometry, Prentice Hall, p. 37

233 Which two mathematicians solved the first probability problem?

- A** Euclid and Pythagoras **B** Blaise Pascal and Pierre Fermat
C Karl Friedrich Gauss and Johann Kepler **D** Charles Richter

Source: Algebra 2, McDougal Littell, p. 737

235 Who was the father of plane geometry?

- A** Descartes **B** Euler
C Euclid **D** Pythagoras

Source: Geometry, Prentice Hall, p. 393

237 If distance is d , rate is r , and time is t , what is the distance formula?

- A** $d = r \cdot t$ **B** $r = d \cdot t$
C $d = r/t$ **D** $d = t/r$

Source: Algebra 2, McDougal Littell, p. 33

239 Which expression can NOT be simplified?

- A** $4x - x$ **B** $-(x + x)$
C $4x + 3x$ **D** $4x - 3$

Source: Algebra 2, McDougal Littell, p. 62

234 What is used to describe the variability of data that have a normal distribution?

- A** Standard deviation **B** Binomial deviation
C Bimodal deviation **D** Negative deviation

Source: Math On Call, Houghton Mifflin, p.282

236 If a card is drawn randomly from a standard deck of 52 playing cards, what is the probability of drawing an ace?

- A** $26/52$ **B** $1/52$
C $13/52$ **D** $4/52$

Source: Algebra 2, McDougal Littell, p. 719

238 What is the name of the property that states that between every 2 rational numbers there is another rational number?

- A** Commutative **B** Associative
C Distributive **D** Density

Source: Math On Call, Houghton Mifflin, p.230

240 Coplanar lines that do NOT intersect are called:

- A** Perpendicular **B** Skew
C Obtuse **D** Parallel

Source: Geometry, Prentice Hall, p. 18

241 A horizontal line has slope:

- A 0 B 1
C Undefined D Infinity

Source: Algebra 1, Mcgraw-Hill, p. 326

242 What is .000342 written in scientific notation?

- A $.342 \times 10^{-5}$ B 3.42×10^{-4}
C 34.2×10^{-4} D 3.42×10^4

Source: Algebra2, McDougal Litell, p. 176

243 What is the value of 3^{-2} ?

- A -6 B -9
C $1/9$ D $-1/9$

Source: Algebra 2, McDougal Littell, p 457

244 What is the name of a line in the plane of a circle that intersects the circle in exactly 1 point?

- A Chord B Arc
C Secant D Tangent

Source: Geometry, Prentice Hall, p. 593

245 If the discriminant ($b^2 - 4ac$) for the quadratic equation $ax^2 + bx + c = 0$ is negative, how many real solutions does it have?

- A 2 B 3
C 1 D 0

Source: Algebra To Go, Houghton Mifflin, p.187

246 What is the image of the point (-1, 2) under a reflection in the line $x = 0$?

- A (-1, 2) B (1, 2)
C (1, -2) D (2, -1)

Source: Geometry, Prentice Hall, p. 129

247 If quadrilateral ABCD is congruent to quadrilateral QRST, which segment is congruent to segment DC?

- A Segment RS B Segment RQ
C Segment QR D Segment TS

Source: Geometry, Prentice Hall, p. 426

248 Complete: In a circle, a radius drawn to the point of tangency is _____ to the tangent.

- A Equivalent B Perpendicular
C Parallel D Opposite

Source: Algebra To Go, Houghton Mifflin, p.255

249 *In plane geometry, 2 points determine a*

_____ .

- A Plane B Line
C Midpoint D Coordinate

Source: Algebra To Go, Houghton Mifflin, p.210

251 *The mean for the set of data 3, 4, 6, 7 is* _____

- A 4 B 5
C 6 D 10

Source: Algebra 1, Mcgraw-Hill, p. 179

253 *Find the number of permutations of 5 things taken 2 at a time.*

- A 20 B 7
C 25 D 10

Source: Algebra 2, McDougal Littel, p. 704

255 *Pyramids are named by their:*

- A Faces B Base
C Location D Pharaoh

Source: Geometry, Prentice Hall, p. 316

250 *Express 0.00012 in scientific notation.*

- A 1.2×10^4 B 12×10^4
C 12×10^{-4} D 1.2×10^{-4}

Source: Algebra 1, Mcgraw-Hill, p. 506

252 *If $\frac{2}{3} = \frac{10}{x}$, what is x equal to?*

- A 30 B 40
C $\frac{20}{3}$ D 15

Source: Algebra 1, Mcgraw-Hill, p. 196

254 *What is the rectangular arrangement of numbers in rows and columns called?*

- A Matrix B Coordinate grid
C Vector D Line

Source: Algebra 2, McDougal Littel, p. 199

256 *Two intersecting lines are _____ coplanar.*

- A Always B Sometimes
C Never D Acutely

Source: Geometry, Prentice Hall, p. 16

257 *In transformational geometry, a slide is also called a _____ .*

- A Rotation
- B Reflection
- C Slope
- D Translation

Source: Algebra To Go, Houghton Mifflin, p.268

258 *Complete: The product of 2 negative numbers is _____ positive.*

- A Always
- B Sometimes
- C Never
- D Inversely

Source: Math On Call, Houghton Mifflin, p.164

259 *Opposite sides of a parallelogram are:*

- A Horizontal
- B Congruent
- C Equiangular
- D Perpendicular

Source: Geometry, Prentice Hall, p. 448

260 *What are 3 or more lines that intersect in one point called?*

- A Perpendicular
- B Concurrent
- C Medians
- D Skew

Source: Geometry, Prentice Hall, p. 227

261 *The diagonals of which quadrilateral are always congruent?*

- A Kite
- B Rhombus
- C Rectangle
- D Trapezoid

Source: Geometry, Prentice Hall, p. 464

262 *Name the line that the graph of an exponential function approaches as you move away from the origin.*

- A Exponent
- B Perpendicular bisector
- C Logarithm
- D Asymptote

Source: Algebra 2, McDougal Littell, p. 465

263 *Two line segments with the same length are:*

- A Congruent
- B Complementary
- C Similar
- D Adjacent

Source: Geometry, Prentice Hall, p. 25

264 *Solve the equation $2x - 1 = 3$.*

- A $x = 1$
- B $x = -1$
- C $x = 8$
- D $x = 2$

Source: Algebra 1, Mcgraw-Hill, p. 155

265 Which set of numbers is closed with respect to division?

- A Counting numbers B Whole numbers
C Integers D Rational numbers

Source: Algebra 2, McDougal Littel, p. 3

267 In a regular polygon, the perpendicular distance from the center to a side is called the:

- A Radius B Leg
C Hypotenuse D Apothem

Source: Geometry, Prentice Hall, p. 274

269 Solve $|x| \geq 3$.

- A $x \leq -3$ B $x \geq 3$ or $x \leq -3$
C $-3 \leq x \leq 3$ D $x \geq 3$

Source: Algebra 1, Mcgraw-Hill, p. 51

271 The supplement of an 80 degree angle measures:

- A 180 degrees B 100 degrees
C 10 degrees D 80 degrees

Source: Geometry, Prentice Hall, p. 48

266 The sum of the measures of the angles of a triangle is:

- A 180 degrees B 360 degrees
C 90 degrees D Not enough information

Source: Geometry, Prentice Hall, p.117

268 Complete: Two line segments are _____ coplanar.

- A Always B Sometimes
C Never D Linear

Source: Geometry, Prentice Hall, p. 60

270 Put these numbers in increasing order from left to right: $5/6, -2, 1, 6/5, -6, 7/8$

- A -6, -2, $7/8, 5/6, 1, 6/5$ B -6, -2, $5/6, 7/8, 1, 6/5$
C -2, -6, $5/6, 7/8, 1, 6/5$ D $5/6, 7/8, 1, 6/5, -2, -6$

Source: Algebra 2, McDougal Littel, p. 7

272 What is the least common denominator for the sum $\frac{5}{3n} + \frac{1}{6n^2}$?

- A $18n^3$ B $3n$
C $6n^2$ D $9n^3$

Source: Algebra 1, Mcgraw-Hill, p. 686

273 Complete: The area of a parallelogram with base b and height h is the same as the area of a _____ with base b and height h .

- A Triangle B Rectangle
C Quadrilateral D Trapezoid

Source: Geometry, Prentice Hall, p. 670

275 The least common multiple of 4 and 10 is:

- A 14 B 40
C 2 D 20

Source: Algebra 1, Mcgraw-Hill, p. 685

277 What kind of sequence of numbers is 2, 6, 18, 54...

- A Arithmetic B Power
C Logarithmic D Geometric

Source: Algebra 2, McDougal Littel, p. 666

279 Evaluate $\frac{(-5)(-3)|-8|}{4}$.

- A -30 B 60
C -60 D 30

Source: Algebra 1, Mcgraw-Hill, p. 380

274 If a card is randomly selected from a standard deck of 52 playing cards, what is the probability that it is an ace OR a face card (jack, queen, king)?

- A $\frac{12}{52} - \frac{4}{52} = \frac{8}{52}$ B $\frac{4}{52} + \frac{12}{52} = \frac{16}{52}$
C $\frac{4}{52} + \frac{13}{52} = \frac{17}{52}$ D $\frac{13}{52} + \frac{13}{52} = \frac{26}{52}$

Source: Algebra 2, McDougal Littel, p. 724

276 The correct order of operations is:

- A (), exponents, \times & \div , + & - B exponents, (), \times & \div , + & -
C (), exponents, + & -, \times & \div D In order from left to right

Source: Algebra 1, Mcgraw-Hill, p. 139

278 The expression formed by adding the terms of a number sequence is a:

- A Sequence B Product
C Square root D Series

Source: Algebra 2, McDougal Littel, p. 653

280 Another name for multiplicative inverse is:

- A Opposite B Identity
C Reciprocal D Operation

Source: Algebra 2, McDougal Littel, p. 5

281 *What is the geometric mean of 4 and 9?
(Hint: $4/x = x/9$)*

- A 36 B 13
C 6 D 13/2

Source: Geometry, Prentice Hall, p. 512

283 *What is the value of -6^0 ?*

- A 1 B 0
C -1 D -6

Source: Algebra 2, McDougal Littel, p. 392

285 *The greatest common factor of 18 and 24 is:*

- A 6 B 3
C 2 D 48

Source: Algebra 1, Mcgraw-Hill, p. 559

287 *30 is what percent of 50?*

- A 60% B 55%
C 65% D 50%

Source: Algebra 1, Mcgraw-Hill, p. 559

282 *Which of the following is NOT an application of trigonometry?*

- A Surveying B Angle of elevation
C Navigation D Telling time

Source: Trigonometry, Harcourt Brace Jovanovich, p.41, 47, 49

284 *What part of the quadratic formula is the discriminate?*

- A b^2-4ac B $2a$
C $-4ac$ D The whole formula

Source: Algebra 2, McDougal Littel, p. 293

286 *The next term of the sequence 1, 1, 2, 3, 5, 8... is:*

- A 13 B 40
C 11 D 10

Source: Algebra 1, Mcgraw-Hill, p. 13

288 *What is the formula for volume of a cylinder?*

- A $V = r^2h$ B $V = r^2$
C $V = 2 rh + 2 r^2D$ D $V = 4/3 r^3$

Source: Geometry, Prentice Hall, p. 325

289 *What is the area of an isosceles right triangle with a leg length of 4 cm?*

- A 12 cm B 16 square cm
C 32 cm^2 D 8 square cm

Source: Geometry, Prentice Hall, p. 251

291 *Find the area of a trapezoid whose parallel sides (the bases) measure 2 cm and 5 cm and whose height is 4 cm.*

- A 14 cm^2 B 28 cm^2
C 40 cm^2 D 20 cm^2

Source: Geometry, Prentice Hall, p. 269

293 *What are the measures of the acute angles of an isosceles right triangle?*

- A 45 degrees and 45 degrees B 90 degrees and 45 degrees
C 30 degrees and 60 degrees D 60 degrees and 60 degrees

Source: Geometry, Prentice Hall, p. 269

295 *To find the probability of drawing a jack, then a king from a standard 52-card deck without replacement, perform:*

- A $4/52 \cdot 4/51$ B $4/52 + 4/52$
C $4/52 + 4/51$ D $4/52 \cdot 3/51$

Source: Algebra 2, McDougal Littell, p. 732

290 *Name the angle formed by the intersection of 2 planes.*

- A Dihedral B Quadratic
C Vertex D Parabolic

Source: Algebra To Go, Houghton Mifflin, p.218

292 *Name the computer program that organizes, analyzes, computes, sorts, and retrieves data.*

- A Spreadsheet B Modem
C Active cell D Word processing

Source: Algebra To Go, Houghton Mifflin, p.428

294 *What is the 4th root of 5^3 in exponential form?*

- A 5 to the $3/4$ power B 125
C 15 D 5 to the $4/3$ power

Source: Algebra 2, McDougal Littill, p. 402

296 *An acute angle is an angle that:*

- A Is less than 90° B Is good looking
C Is supplementary D Measures between 90 and 180 degrees

Source: Geometry, Prentice Hall, p. 27

297 *In trigonometry, the cosine of an acute angle of a right triangle (in terms of lengths of sides) is:*

A opposite
adjacent

B adjacent
hypotenuse

C opposite
hypotenuse

D hypotenuse
opposite

Source: Algebra 2, McDougal Littel, p. 769

299 *Choose the expression that has a value of 28.*

A $8 \cdot 4 - 8$

B $(3 + 5) \cdot 7 \div 2$

C $4 + 3 \cdot 4$

D $75/3 - 2$

Source: Algebra 1, Mcgraw-Hill, p. 138

298 *What is the simplified form of $(8)^{2/3}$?*

A 4

B 2

C $16/3$

D 8

Source: Algebra 2, McDougal Littel, p. 172

300 *What does 2^{-3} equal?*

A $2/3$

B -8

C -6

D $1/8$

Source: Algebra 1, Mcgraw-Hill, p. 323