

Name: _____

Geometry Teacher: _____

Lake Braddock High School
Algebra 2 Honors
Summer Review Packet
2009

*For students entering Algebra 2 Honors
in
September 2009*

Directions: All students entering Algebra 2 Honors are expected to be proficient in all their previously-learned Algebra 1 skills. The following exercises are intended to provide a review of the Algebra 1 skills needed to be successful in Algebra 2 Honors. Except for problems with an asterisk (*), complete all the problems without use of a calculator. Show all work - even for multiple choice problems!

If you need assistance with any Algebra 1 topics, please refer to the following websites:

- <http://www.regentsprep.org/Regents/math/ALGEBRA/math-ALGEBRA.htm>
- <http://coolmath.com/algebra/Algebra1/index.html>
- <http://www.algebra.com/>

Answers to the exercises are provided on the last page - however, you must show all work to receive full credit.

***** Note: THIS PACKET SHOULD BE COMPLETED FOR TURN-IN ON THE FIRST DAY OF CLASS. YOU WILL TAKE AN ALGEBRA 1 SKILLS QUIZ, BASED ON THIS PACKET, ON YOUR 2ND DAY OF CLASS**

ALGEBRA I STANDARD A.2

The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables. Students will choose an appropriate computational technique, such as mental mathematics, calculator, or paper and pencil.

1) What is the value of $\frac{15-6\cdot 2}{8\cdot(4^2-7)}$?

a) $2\frac{1}{4}$

b) $\frac{1}{24}$

c) $\frac{3}{8}$

d) $\frac{3}{121}$

e) $\frac{3}{4}$

2) Halie's bedroom is a square measuring 10 feet along the base of each wall and 10 feet high. Which expression is used to calculate the square footage needed to wallpaper her room?

a) 10^4

b) 10^3

c) $4(10^2)$

d) $4^2\cdot 10$

e) $(4\cdot 10)^2$

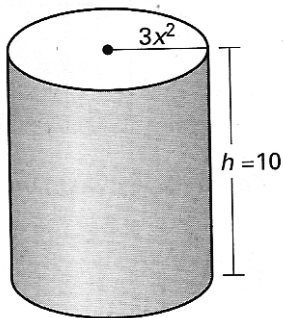
3*) In baseball, the pitcher's mound is 60.5 feet from home plate. The strike zone, or distance across home plate, is 17 inches.

- a. If a pitcher throws a baseball at 90 miles per hour, how many seconds does it take for the baseball to reach home plate?
- b. How long, in seconds, is the ball in the strike zone?

ALGEBRA I STANDARD A.10

The student will apply the laws of exponents to perform operations on expressions with integral exponents, using scientific notation when appropriate.

1*) The volume of a cylinder is given by $V = \pi r^2 h$, where r is the radius, h is the height, and π is approximately 3.14. What is the volume of the cylinder in terms of x ?



- a) $92.4x^2$ b) $282.6x^2$ c) $92.4x^4$
 d) $282.6x^4$ e) $887.4x^4$

2) Evaluate $(5^{-3})\left(\frac{1}{5^{-5}}\right)(5^{-4})$.

- a) 10 b) -25 c) $\frac{1}{25}$ d) $\frac{1}{10}$ e) $-\frac{1}{25}$

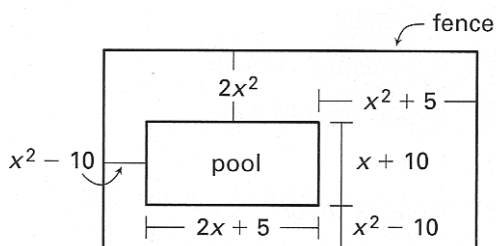
3) Simplify $\frac{(x^2y)^3}{2xy^2} \cdot \left(\frac{3x^4y^2}{2xy}\right)^{-2}$.

- a) $\frac{9x^2}{8y}$ b) $\frac{3}{4}x^{10}y$ c) $\frac{2}{9}xy$ d) $\frac{2}{9}x^2y$ e) $\frac{2}{9xy}$

4) The volume of a sphere is given by $V = \frac{4}{3}\pi r^3$, where r is the radius of the sphere. Assuming that the radius of the Moon is $\frac{1}{4}$ the radius of Earth, find the ratio of the volume of Earth to the volume of the Moon. Let r represent the radius of Earth.

The student will add, subtract, and multiply polynomials and divide polynomials with monomial divisors, using concrete objects, pictorial and area representations, and algebraic manipulations.

1) You want to fence in a pool and deck area. Find the expression which correctly determines the amount of fencing required to complete the job.



a) $5x^2 + 3x$

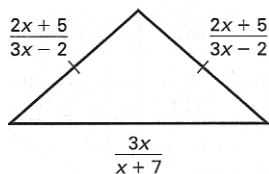
b) $10x^2 + 6x$

c) $10x^2 + 3x + 10$

d) $5x^2 + 6x + 10$

e) $10x^2 + 8x + 20$

2) Which expression represents the perimeter of the triangle?



a) $\frac{13x^2 + 32x + 70}{(3x-2)(x+7)}$

b) $\frac{4x^2 + 42x + 68}{(3x-2)(x+7)}$

c) $\frac{13x^2 + 14x + 25}{(3x-2)(x+7)}$

d) $\frac{13x^2 + 44x + 70}{(x+7)(3x-2)}$

e) $\frac{4x^2 + 42x + 68}{(3x-2)^2(x+7)}$

3) The area of a rectangle is given by $12x^2 + 5x - 2$. One side has length $4x - 1$. Find the length of the other side.

4) What is $15x^2 - 11x - 6$ divided by $5x - 2$?

The student will factor completely first- and second-degree binomials and trinomials in one or two variables. The graphing calculator will be used as a tool for factoring and for confirming algebraic factorizations.

1) The area of a circle is given by $A = \pi(4x^2 + 28x + 49)$. What is the radius of the circle?

a) $2x - 7$

b) $7x - 2$

c) $7x + 2$

d) $2x + 7$

e) $-2x + 7$

2) The length of a box is 5 inches less than twice the width. The height is 4 inches more than three times the width. The box has a volume of 520 cubic inches. Which of the following equations can be used to find the height of the box?

a) $w(2l - 5)(3h + 4) = 520$

b) $w(2w - 5)(3w + 4) = 520$

c) $w(2w + 5)(3w - 4) = 520$

d) $w(2w - 5)(3w - 4) = 520$

e) $l(5 - 2w)(3h + 4) = 520$

3) Factor completely, if possible, the following expressions:

a) $m^2 - 7m - 30$

b) $10y^2 + 19y + 6$

c) $20k^2 - 125$

d) $21w^4 + 35w^3 - 14w^2$

The student will express the square root of a whole number in simplest radical form and approximate square roots to the nearest tenth

1) Which one of the following is the simplified form of $\frac{\sqrt{30}\sqrt{18}}{3\sqrt{5}}$?

a) $2\sqrt{3}$

b) $\frac{2\sqrt{15}}{3}$

c) 6

d) $6\sqrt{5}$

e) $2\sqrt{5}$

2) Simplify the expression $\sqrt{500} - \sqrt{180} + \sqrt{80}$.

a) $12\sqrt{2}$

b) $5\sqrt{8}$

c) $20\sqrt{5}$

d) $8\sqrt{5}$

e) 20

3) The area of a rectangle is $5 + \sqrt{3}$. If the length of one side is $2 + \sqrt{3}$, what is the length of the other side?

a) $\frac{7}{2}$

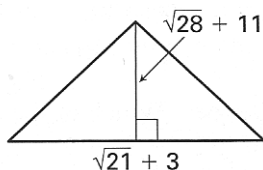
b) $7 + 7\sqrt{3}$

c) $13 - 3\sqrt{3}$

d) $7 + 3\sqrt{3}$

e) $7 - 3\sqrt{3}$

4) Find the area of the triangle. Give the answer as a simplified radical.



The student will create and use tabular, symbolic, graphical, verbal, and physical representations to analyze a given set of data for the existence of a pattern, determine the domain and range of relations, and identify the relations that are functions.

1) Choose the correct domain for the function $t = 35 + 5w$ where $0 \leq w \leq 5$ and w is an integer.

- a) 0,1,2,3,4,5 b) 1,2,3,4,5 c) 35,40,45,50,55 d) 40,45,50,55 e) 40,41,42,43,44,45

2) You are at an altitude of 200 feet in a hot-air balloon. You turn on the burner and rise at a rate of 25 feet per minute for 6 minutes.

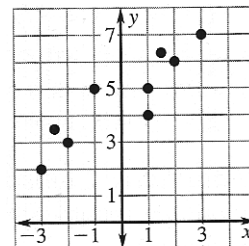
a) Write an equation for your altitude as a function of time (define all variables).

b) Make an input-output table for the function.

Input	Output

3) Which equation would best fit the given graph?

- a) $y = \frac{3}{4}x + \frac{9}{2}$ b) $y = -\frac{3}{4}x + \frac{9}{2}$
 c) $y = \frac{3}{4}x - \frac{6}{2}$ d) $y = \frac{3}{4}x + 3$
 e) $y = \frac{1}{2}x + 2$



The student will, given a rule, find the values of a function for elements in its domain and locate the zeros of the function both algebraically and with a graphing calculator. The value of $f(x)$ will be related to the ordinate on the graph.

1) Use the graph to determine the zeros of the equation of the graph.

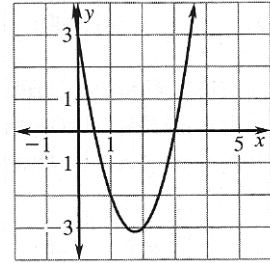
a) 3 and -3

b) 1 and 4

c) $-\frac{1}{2}$ and 3

d) $\frac{1}{2}$ and 3

e) 4 and -3



2) Choose the correct range for the function $f(x) = 250 + 10x$ where $0 \leq x \leq 4$ and x is an integer.

a) 0, 1, 2, 3, 4 b) 0, 1, 2, 3 c) 250, 260, 270, 280, 290 d) 250, 260, 270, 280 e) 260, 261, 262, 263, 264

3*) Lake Braddock High School Band is selling sub sandwiches for a fundraiser. It costs \$1.25 to make each sandwich. They sell them for \$2.50 each.

a) Write a function that determines the profit from the sale (identify all variables).

b) The band must pay a \$75 fee to use the cafeteria to assemble the sandwiches. Write a function that includes this cost.

c) The band wants a \$1000 profit. How many sandwiches must they sell?

d) If they sell 820 sandwiches, what was the profit earned?

ALGEBRA I STANDARD A.18

The student will analyze a relation to determine whether a direct variation exists and represent it algebraically and graphically, if possible.

1) The variables x and y vary directly. Which equation relates x and y when $x = \frac{1}{2}$ and $y = 6$?

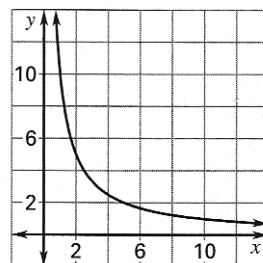
- a) $x = 3y$ b) $y = 3x$ c) $x = 12y$ d) $y = 12x$ e) $y = \frac{1}{2}x$

2) Which of the following would *not* be an example of inverse variation?

- a) The hours h you must work to earn \$500 and your hourly pay p .
b) The base b and height h of a triangle if the area is 15 square inches.
c) The time t it takes to drive 30 miles and your rate r .
d) The rectangle's length l and the area h if the width is 5 inches.
e) None of these.

3) Choose the type of variation and the equation that represents the graph.

- a) Inverse; $y = 10x$ b) Inverse; $y = \frac{10}{x}$
c) Direct; $y = 10x$ d) Direct; $y = \frac{10}{x}$
e) None of these



ALGEBRA I STANDARD A.1

The student will solve multistep linear equations and inequalities in one variable, solve literal equations (formulas) for a given variable, and apply these skills to solve practical problems. Graphing calculators will be used to confirm algebraic solutions.

1) Solve the equation $-10 + 2x + 3(5 - x) = \frac{1}{2}(4x - 8)$.

a) -3

b) 3

c) $\frac{1}{3}$

d) $-\frac{1}{3}$

e) 13

2) Rewrite the equation $3y - 2(x + 1) = y + 3(x + 6)$ so that y is a function of x .

a) $y = 2x + 10$

b) $y = \frac{1}{2}x + 10$

c) $x = \frac{2}{5}y - 4$

d) $y = \frac{5}{2}x + 10$

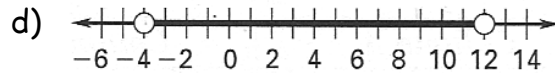
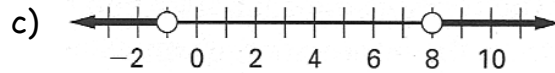
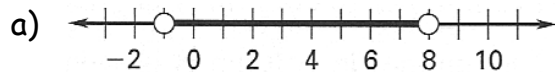
e) $x = \frac{4}{5}y - 4$

3) The relationship between the sale price S , the list price L , and the discount rate r is given by $S = L - rL$.

a) Solve for r in the above formula.

b) Solve for L in the above formula.

4) Which graph represents the solution of $|2x - 7| + 3 < 12$?



The student will justify steps used in simplifying expressions and solving equations and inequalities. Justifications will include the use of concrete objects; pictorial representations; and the properties of real numbers, equality, and inequality.

1) Describe the solution to the inequality $-\frac{1}{2}x - 4 \leq 6$.

- a) All real numbers greater than or equal to -20.
- b) All real numbers greater than or equal to 20.
- c) All real numbers less than or equal to -20.
- d) All real numbers less than or equal to -5.
- e) All real numbers greater than or equal to -5.

2) Solve the equation or inequality. When appropriate, round answers to the nearest thousandth.

a) $\frac{3}{4}(24 - 8b) = 2(5b + 1)$

b*) $4.21x + 5.39 = 12.07(2.01 - 4.72x)$

c) $7 \leq -2x + 21 < 31$

3*) Your cell phone company charges \$29.95 per month and gives you 30 free minutes per month. Additional minutes cost \$.32 per minute. Your last bill came to \$46.82. Let x represent the number of minutes you talked last month.

a) Write an equation that models this situation.

b) Approximately how many minutes did you use the phone? Round to the nearest thousandth.

c) How many minutes did you have to pay extra money for?

ALGEBRA I STANDARD A.6

The student will select, justify, and apply an appropriate technique to graph linear functions and linear inequalities in two variables. Techniques will include slope-intercept, x - and y -intercepts, graphing by transformation, and the use of the graphing calculator.

1) What is the equation of the horizontal line that passes through point $(2, -8)$?

a) $y = 2$

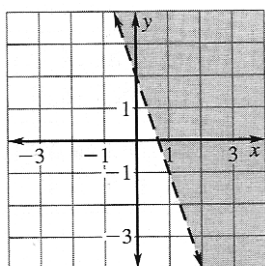
b) $x = 2$

c) $y = -8$

d) $x = -8$

e) $y = 0$

2) Choose the inequality whose solution is shown in the graph.



a) $y < -3x + 2$

b) $y > -3x + 2$

c) $y > 3x + 2$

d) $y \geq -3x + 2$

e) $y \leq -3x + 2$

3) What is the x -intercept of the line $\frac{1}{2}x + \frac{3}{5}y = 20$?

a) 0

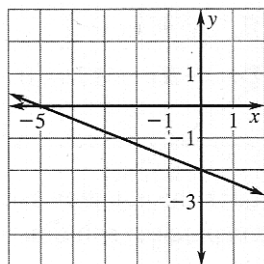
b) 12

c) $\frac{100}{3}$

d) 10

e) 40

4) What is the equation, in slope-intercept form, of the line shown?



a) $-2x - 5y = 10$

b) $y = -\frac{2}{5}x + 2$

c) $y = -\frac{2}{5}x - 2$

d) $-5x - 2y = 10$

e) $y = \frac{2}{5}x - 2$

ALGEBRA I STANDARD A.7

The student will determine the slope of a line when given an equation of the line, the graph of the line, or two points on the line. Slope will be described as rate of change and will be positive, negative, zero, or undefined. The graphing calculator will be used to investigate the effect of changes in the slope on the graph of the line.

1) Find the value of y so that the line passing through $(2, 6)$ and $(1, y)$ has a slope of 5.

a) $\frac{5}{29}$

b) 9

c) $\frac{27}{5}$

d) -1

e) 1

2) What is the slope of the graph of $4x + 3y = 15$?

a) 4

b) -4

c) $-\frac{4}{3}$

d) $\frac{4}{3}$

e) 5

3*) In 1990, a company had a profit of \$173,000,000. In 1996, the profit was \$206,000,000. If the profit increased by the same amount each year, find the rate of change of the company's profits in dollars per year.

4) Is it possible to find another line that is parallel to $3x + 9y = 1$ and passes through the point $(0, \frac{1}{9})$? Explain your reasoning.

ALGEBRA I STANDARD A.8

The student will write an equation of a line when given the graph of the line, two points on the line, or the slope and a point on the line.

1) What is an equation of the line that passes through points $(2, 3)$ and $(-1, 4)$?

- a) $y = 3x - \frac{11}{3}$ b) $y = -\frac{1}{3}x - \frac{11}{3}$ c) $y = -3x + \frac{11}{3}$ d) $y = -\frac{1}{3}x + \frac{11}{3}$ e) $y = -\frac{1}{3}x + 3$

2) What is an equation of the line that is parallel to $y = \frac{1}{2}x - 3$ and has an x -intercept of -4 ?

- a) $y = \frac{1}{2}x - 4$ b) $y = \frac{1}{2}x - 2$ c) $y = -\frac{1}{2}x - 2$ d) $y = -\frac{1}{2}x + 2$ e) $y = \frac{1}{2}x + 2$

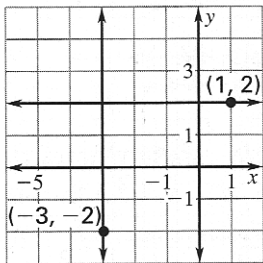
3) A line passes through the points $(-1, 4)$ and $(-7, -5)$.

a) Write an equation of the line in standard form.

b) Write an equation of the line in slope-intercept form.

c) Write an equation of the line in point-slope form.

4) What is the standard form of an equation of the vertical line in the graph?



a) $y = -2$

b) $x = -3$

c) $y = 2$

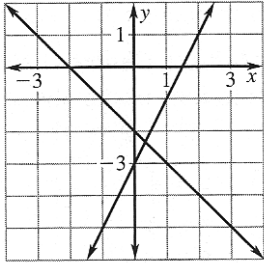
d) $x = 1$

e) $y = -3$

ALGEBRA I STANDARD A.9

The student will solve systems of two linear equations in two variables both algebraically and graphically and apply these techniques to solve practical problems. Graphing calculators will be used both as a primary tool for solution and to confirm an algebraic solution.

- 1) Which point represents the solution of the system of equations? $y = 2x - 3$
 $y = -x - 2$



- a) $(0, -3)$ b) $(0, -2)$
c) $(\frac{2}{3}, -\frac{5}{3})$ d) $(1, 3)$
e) $(\frac{1}{3}, -\frac{7}{3})$

- 2) If $3x + 2y = 8$ and $-4x + 3y = -5$, then $x + y = \underline{\quad?}$

- a) 6 b) 8 c) 7 d) 5 e) 3

- 3) Two hunters start from different points in the woods and hike towards their campsite. The first hunter travels a trail along the line $2y - x = 24$. The second hunter's trail follows the line $3y = -2x - 18$. They meet at the campsite. What are the coordinates of the site?

- a) $(-\frac{108}{7}, \frac{30}{7})$ b) $(-\frac{30}{7}, \frac{108}{7})$ c) $(-13, 2)$ d) $(-14, 5)$ e) $(-\frac{120}{7}, \frac{48}{7})$

- 4*) You are selling tickets for a high school play. Student tickets cost \$4 and general admission tickets cost \$6. You sell 525 tickets and collect \$2876.

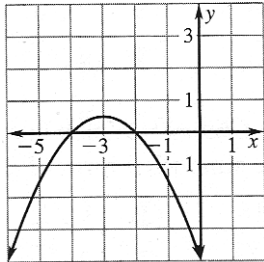
a) Write a system of equations that models this situation (identify all variables).

b) How many of each type of ticket did you sell?

ALGEBRA I STANDARD A.14

The student will solve quadratic equations in one variable both algebraically and graphically. Graphing calculators will be used both as a primary tool in solving problems and to verify algebraic solutions.

1) Which of the following quadratic equations is represented by the graph?



a) $y = -2x^2 - 3x - 4$

b) $y = \frac{1}{2}x^2 - 3x - 4$

c) $y = 2x^2 - 3x - 4$

d) $y = -\frac{1}{2}x^2 - 3x - 4$

e) $y = \frac{1}{2}x^2 + 3x - 4$

2) Which of the following is a solution of $7x^2 + 5x + 8 = 10$?

a) $\frac{2}{7}$

b) 1

c) $\frac{7}{2}$

d) $-\frac{2}{7}$

e) $\frac{3}{7}$

3*) A shot put champion releases the shot at a 55° angle. The path of the shot is modeled by the equation $y = -0.021895x^2 + 1.428148x + 6$ where x represents the horizontal distance (in feet) and y represents the height (in feet). How far does the shot travel?

4) Use the discriminant to determine the number of real solutions for the equation

$3x^2 - 7x + 8 = 9$?

a) 3

b) 1

c) 2

d) infinitely many

e) none

ALGEBRA I STANDARD A.4

The student will use matrices to organize and manipulate data, including matrix addition, subtraction, and scalar multiplication. Data will arise from business, industrial, and consumer situations.

1) Find the sum and difference of $\begin{bmatrix} 6 & -8 & 7 & -5 \\ 1 & 9 & 0 & -6 \end{bmatrix}$ and $\begin{bmatrix} 5 & 2 & -1 & 3 \\ 3 & -4 & 5 & -1 \end{bmatrix}$.

2) Find $a, b, c,$ and $d.$ $\begin{bmatrix} 4a & b+3 \\ c & d-3 \end{bmatrix} = 2 \begin{bmatrix} 8 & -1 \\ 0 & -6 \end{bmatrix}$

3) Write a matrix to organize the following information about your CD collection.

Country: 4 groups, 6 solo artists, 0 collections

Rap: 8 groups, 3 solo artists, 3 collections

Classical: 1 group, 5 solo artists, 2 collections

ALGEBRA I STANDARD A.16

The student will, given a set of data points, write an equation for a line of best fit and use the equation to make predictions.

1*) The average price of a pound of large gulf shrimp is shown in the table.

Year	1992	1993	1994	1995	1996	1997	1998
Dollars/lb	8.40	9.10	9.80	10.50	11.20	13.50	15.90

a) Find an equation of the line that best fits the data.

b) Use the equation to approximate the price per pound in 2008 (round to the nearest cent).

2*) The winning Olympic discus throws from 1908 to 1996 are shown in the table.

Year	1908	1912	1920	1924	1928	1932	1936	1948	1952	1956
Winning Throw (ft)	134.1	148.3	146.6	151.4	155.3	162.4	165.6	173.2	180.5	184.9
Year	1960	1964	1968	1972	1976	1980	1984	1988	1992	1996
Winning Throw (ft)	194.2	200.1	212.5	211.3	221.5	218.7	218.5	225.8	213.7	227.7

a) Find an equation of the line that best fits the data.

b) Predict the distance of the winning throw in the 2008 Beijing games (round to the nearest tenth of a foot). How close was this prediction to the actual winning throw?

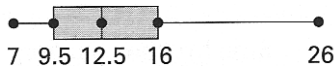
ALGEBRA I STANDARD A.17

The student will compare and contrast multiple one-variable data sets, using statistical techniques that include measures of central tendency, range, and box-and-whisker graphs.

1*) Your test scores in algebra so far are 78, 85, 72, and 81. If you want to average at least an 80, what score do you need on the next test?

- a) 80 b) 84 c) 88 d) 82 e) 90

2) Which set of numbers is represented by the box-and-whisker plot?



- a) 3, 24, 1, 8, 2, 14, 3, 11 b) 8, 25, 2, 28, 12, 25, 11, 28
 c) 12, 13, 8, 10, 13, 11, 17, 9, 8, 13 d) 6, 14, 10, 8, 11, 15, 17, 7, 26
 e) 17, 25, 13, 12, 26, 15, 11, 9, 7, 13, 8, 10

3*) The table shows the number of shutouts that ten baseball pitchers had in their careers (a shutout is a complete game pitched without allowing a run).

a) Find the mean and median for the set of data.

Pitcher	Shutouts
Warren Spahn	63
Christy Mathewson	80
Eddie Plank	69
Nolan Ryan	61
Bert Blyleven	60
Don Sutton	58
Grover Alexander	90
Walter Johnson	110
Cy Young	76
Tom Seaver	61

b) Write the numbers in decreasing order.

c) Does the set of data have a mode? If so, what is it?

**Algebra 2 Honors
Summer Packet Answers**

pg. 3

- 1) b
- 2) c
- 3) a) 0.458 seconds
b) 0.011 seconds

pg. 4

- 1) d
- 2) c
- 3) e
- 4) 64:1

pg. 5

- 1) b
- 2) a
- 3) $3x + 2$
- 4) $3x - 1 - \frac{8}{5x - 2}$

pg. 6

- 1) d
- 2) b
- 3) a) $(m - 10)(m + 3)$
b) $(2y + 3)(5y + 2)$
c) $5(2k - 5)(2k + 5)$
d) $7w^2(3w - 1)(w + 2)$

pg. 7

- 1) a
- 2) d
- 3) e
- 4) $\frac{1}{2}(14\sqrt{3} + 6\sqrt{7} + 11\sqrt{21} + 33)$

pg. 8

- 1) a
- 2) a) $y = 25x + 200$ where y represents altitude (in feet) and x represents time (in minutes)
b)

Input	Output
0	200
1	225
2	250
3	275
4	300
5	325
6	350

- 3) a

pg. 9

- 1) d
- 2) c
- 3) a) $y = 1.25x$
b) $y = 1.25x - 75$
c) 860 sandwiches
d) \$950

pg. 10

- 1) d
- 2) d
- 3) b

pg. 11

- 1) b
- 2) d
- 3) a) $r = \frac{L - S}{L}$
b) $L = \frac{S}{1 - r}$
- 4) a

pg. 12

- 1) a
- 2) a) $b = 1$
b) 0.308
c) $7 \geq x \geq -5$
- 3) a) $y = 29.95 + 0.32(x - 30)$
b) 82.719 minutes
c) 52.719 minutes

pg. 13

- 1) c
- 2) b
- 3) e
- 4) c

pg. 14

- 1) e
- 2) c
- 3) \$5,500,000 per year
- 4) no

pg. 15

- 1) d
- 2) e
- 3) a) $3x - 2y = -11$
b) $y = \frac{3}{2}x + \frac{11}{2}$
c) $y - 4 = \frac{3}{2}(x + 1)$ or $y + 5 = \frac{3}{2}(x + 7)$
- 4) b

pg. 16

- 1) e
- 2) e
- 3) a
- 4) a) x represents the number of student tickets, y represents the number of general tickets
 $4x + 6y = 2876$
 $x + y = 525$
b) 137 student tickets and 388 general tickets

pg. 17

- 1) d
- 2) a
- 3) 69.188 feet
- 4) c

pg. 18

- 1) sum: $\begin{bmatrix} 11 & -6 & 6 & -2 \\ 4 & 5 & 5 & -7 \end{bmatrix}$ difference:

$$\begin{bmatrix} 1 & -10 & 8 & -8 \\ -2 & 13 & -5 & -5 \end{bmatrix}$$

- 2) $a = 4$, $b = -5$, $c = 0$, $d = -9$
groups solo collections

- 3) county $\begin{bmatrix} 4 & 6 & 0 \\ 8 & 3 & 3 \\ 1 & 5 & 2 \end{bmatrix}$
rap
classical

pg. 19

- 1) a) $y = 1.168x - 2318.675$
b) \$26.67
- 2) a) $y = 1.093x - 1948.603$
b) 246.1 feet

pg. 20

- 1) b
- 2) e
- 3) a) mean: 72.8
median: 66
b) 110, 90, 80, 76, 69, 63, 61, 61, 60, 58
c) yes, 61