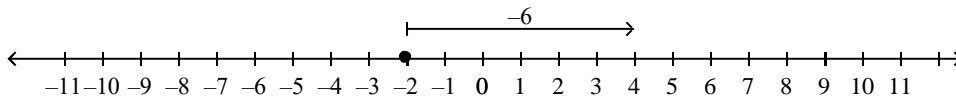


Alg. 2 Hon. Summer Assignment – SHOW ALL WORK! Due the first day of school.

Write the set described.

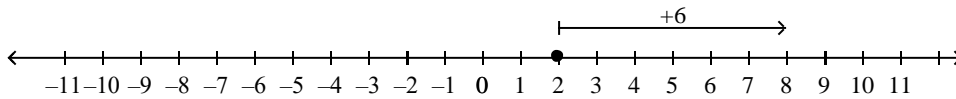
- _____ 1. D is the set of whole numbers less than 3.
 a. $D = \{0,1,2,3,4,5\}$
 b. $D = \{0,1\}$
 c. $D = \{0,1,2\}$
 d. $D = \{0,1,2,3,4,5,6,7\}$
- _____ 2. To which subsets of the real numbers does the number 1.68 belong?
 a. rational numbers
 b. natural numbers, whole numbers, integers, rational numbers
 c. rational numbers, irrational numbers
 d. none of the above

- _____ 3. Which number line model can you use to simplify $2 + 6$?
 a.



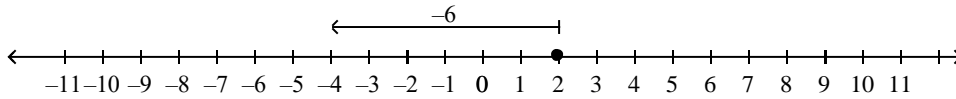
$-2 + 6 = 4$

b.



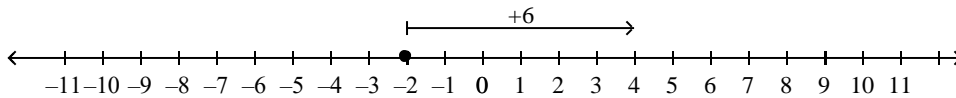
$2 + 6 = 8$

c.



$2 - 6 = -4$

d.



$-2 + 6 = 4$

- _____ 4. Which equation is an identity?
 a. $11 - (2v + 3) = -2v - 8$
 b. $5w + 8 - w = 6w - 2(w - 4)$
 c. $7m - 2 = 8m + 4 - m$
 d. $8y + 9 = 8y - 3$
- _____ 5. Which equation has no solution?
 a. $8 - (5v + 3) = 5v - 5$
 b. $3m - 6 = 5m + 7 - m$
 c. $3w + 4 - w = 5w - 2(w - 2)$
 d. $7y + 9 = 7y - 6$

What is the solution of each equation?

_____ 6. $2(k - 8) - k = k - 16$

- a. 8
- b. -8
- c. infinitely many solutions
- d. no solution

___ 7. $2 + 3z = 5 + 3z$

- a. $-\frac{1}{2}$
- b. infinitely many solutions
- c. no solution
- d. $2\frac{1}{3}$

___ 8. Nina wants to download games for her video game console. Older games cost 500 points and new releases cost 2000 points. Nina has 20,000 points to use. The equation $500a + 2000b = 20,000$, where a is the number of older games and b is the number of new releases, models the situation. How many older games can she download if she downloads one new game? four new games?

- a. 36, 24
- b. 10, 10
- c. 44, 56
- d. 9, 9

Which number is a solution of the inequality?

___ 9. $6 \geq 6k$

- a. 8
- b. 18
- c. 2
- d. 1

___ 10. $3 \leq 3x - 15$

- a. $-\frac{9}{11}$
- b. 5
- c. $\frac{6}{11}$
- d. 6

___ 11. $10.6 < b$

- a. -18
- b. -9
- c. 7
- d. 14

___ 12. $m > \frac{7}{12}$

- a. 1
- b. -1
- c. -9
- d. -5

___ 13. $8 < x(7 - x)$

- a. 2
- b. 8
- c. -1
- d. 0

What are the solutions of the inequality?

___ 14. $-2(3x + 2) \geq -6x - 4$

- a. $x \geq 0$
- b. $x \leq 6$
- c. all real numbers
- d. no solution

___ 15. $10x - 10 - 7x \geq 3x - 2$

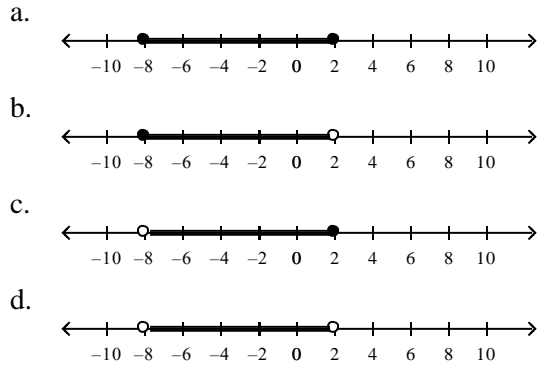
- a. $x \geq -8$
- b. $x \leq 8$
- c. all real numbers
- d. no solution

What is the solution of the inequality?

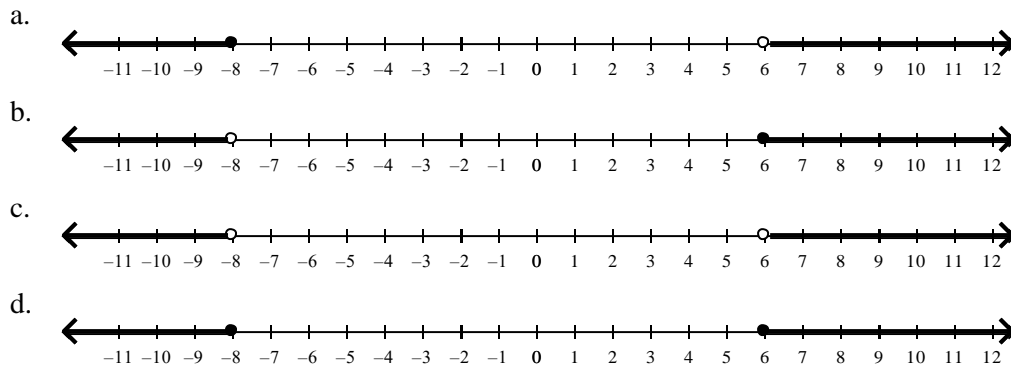
___ 16. $3x + 10 \geq 4$

- a. $x \geq -2$
- b. $x \leq 2$
- c. $x \leq -2$
- d. $x \geq 2$

___ 17. What is the graph of $-8 < x \leq 2$?



18. What is the graph of $x < -8$ or $x > 6$?

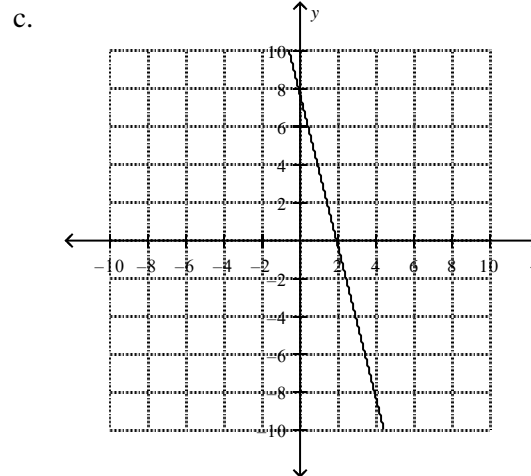
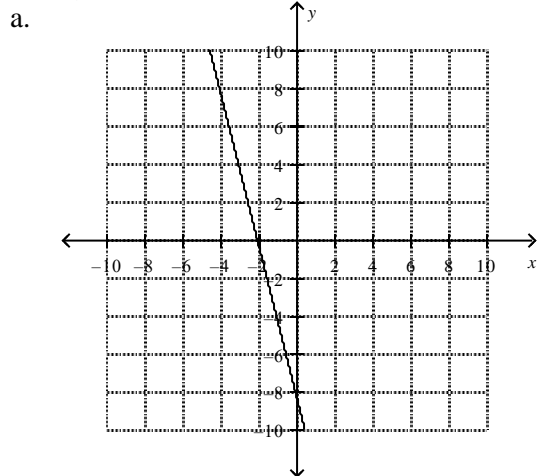


19. Which equation in point-slope form is equivalent to $y = -\frac{3}{4}x + 9$?

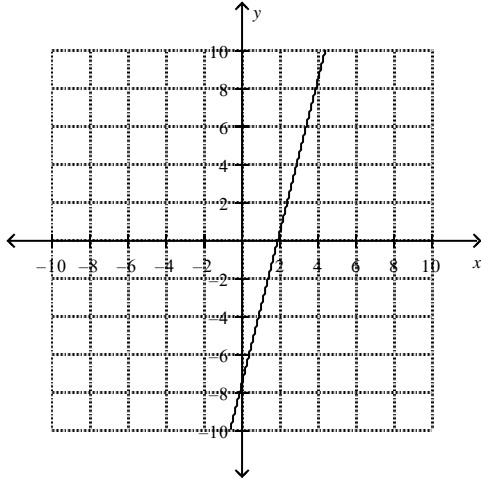
- a. $y - \frac{3}{4} = 9(x - 0)$
- b. $y - 1 = -\frac{3}{4}(x - 9)$
- c. $y - 1 = 9(x + \frac{3}{4})$
- d. $y - 9 = -\frac{3}{4}(x - 0)$

Match the equation with its graph.

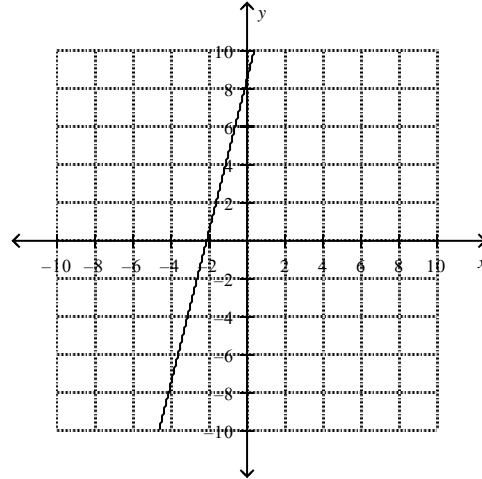
20. $8x - 2y = -16$



b.

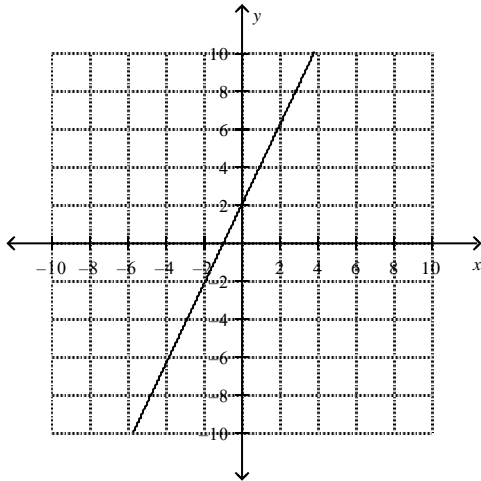


d.

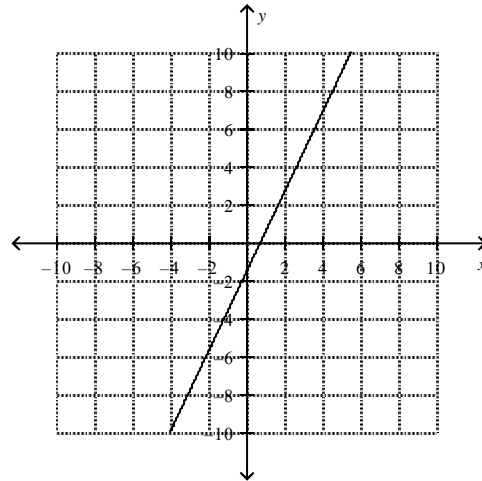


21. $-\frac{7}{4}x - \frac{5}{6}y = \frac{35}{24}$

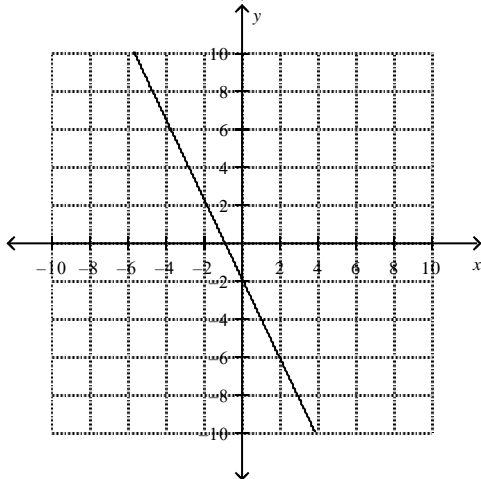
a.



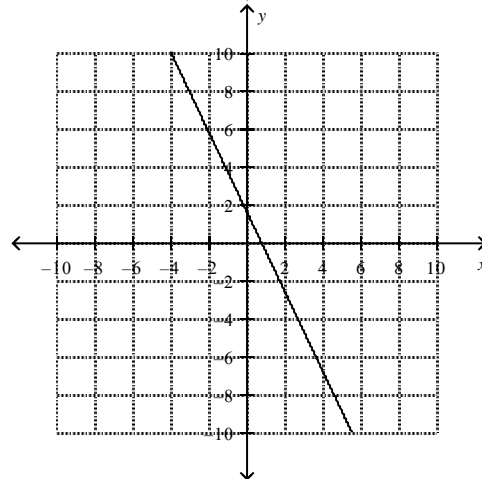
c.



b.



d.



22. Mr. Martinez is buying equipment for his school's computer lab. He has a budget of \$7500. New desktop computers cost \$600 each and new tablets cost \$500 each. Which equation represents how much equipment Mr Martinez can buy with his budget?

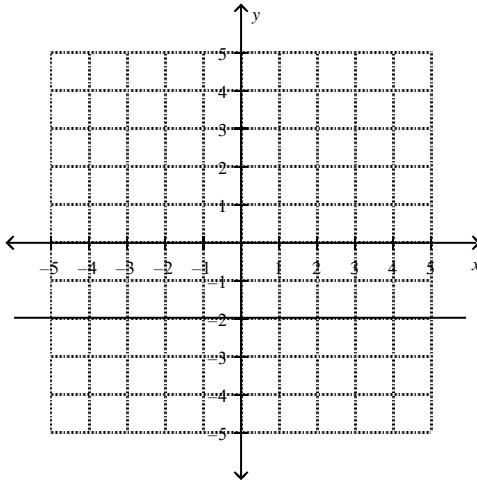
a. $7500x + 600y = 500$

c. $600x + 500y = 7500$

b. $7500 + 600x = 500y$

d. $600x = 500y + 7500$

23. Which equation matches the graph?



- a. $-2y = 4$
 b. $-2x = 4$

- c. $x + y = -2$
 d. $y = -2x$

24. Which equation's graph is a vertical line?

- a. $3x + 3y = 0$
 b. $3x - 3y = 0$

- c. $4x = 12$
 d. $y = -2$

25. Mrs. Dyson works at a music camp. She has \$90 to spend on guitar strings for her students. A pack of bronze strings costs \$6.00. A pack of nickel strings costs \$4.50. The following equation represents her situation.

$$6x + 4.5y = 90$$

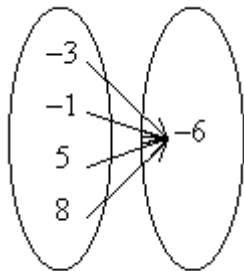
How can you use the equation to find the total number of packs Mrs. Dyson can buy if she only buys nickel strings?

- a. Substitute 0 for x and solve for y .
 b. Substitute 0 for y and solve for x .
 c. Substitute y for x and solve for y .
 d. Substitute x for y and solve for x .

26. Identify the mapping diagram that represents the relation and determine whether the relation is a function.

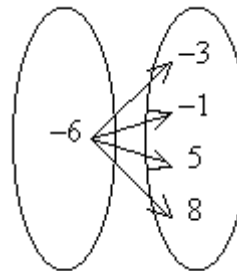
$$\{(-3, -6), (-1, -6), (5, -6), (8, -6)\}$$

a.



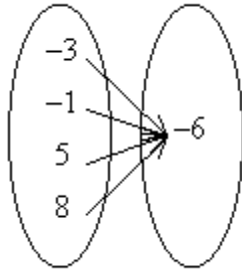
The relation is not a function.

c.



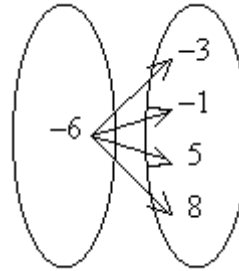
The relation is a function.

b.



The relation is a function.

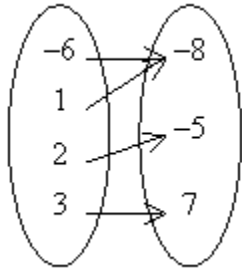
d.



The relation is not a function.

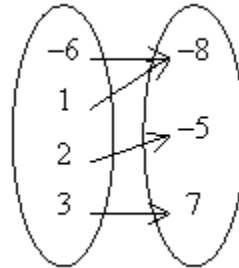
27. Identify the mapping diagram that represents the relation and determine whether the relation is a function.
 $\{(-8, -6), (-5, 2), (-8, 1), (7, 3)\}$

a.



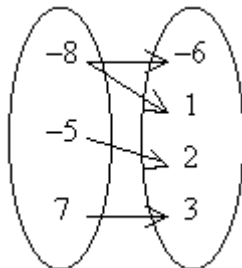
The relation is a function.

c.



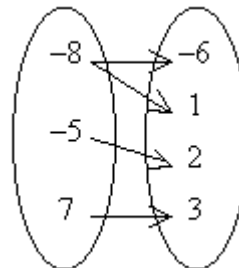
The relation is not a function

b.



The relation is a function.

d.



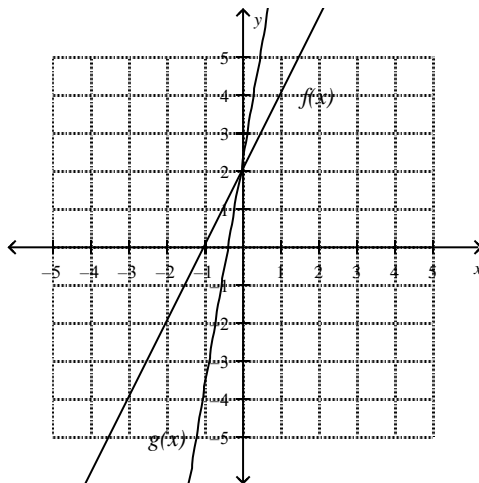
The relation is not a function.

28. The function $j(x) = 39x$ represents the number of jumping jacks $j(x)$ you can do in x minutes. How many jumping jacks can you do in 5 minutes?
- | | |
|----------------------|----------------------|
| a. 195 jumping jacks | c. 144 jumping jacks |
| b. 7 jumping jacks | d. 234 jumping jacks |

29. How are the functions $y = x$ and $y = x + 5$ related? How are their graphs related?
- Each output for $y = x + 5$ is 5 less than the corresponding output for $y = x$.
The graph of $y = x + 5$ is the graph of $y = x$ translated down 5 units.
 - Each output for $y = x + 5$ is 5 more than the corresponding output for $y = x$.
The graph of $y = x + 5$ is the graph of $y = x$ translated up 5 units.
 - Each output for $y = x + 5$ is 5 more than the corresponding output for $y = x$.
The graph of $y = x + 5$ is the graph of $y = x$ translated down 5 units.
 - Each output for $y = x + 5$ is 5 less than the corresponding output for $y = x$.

The graph of $y = x + 5$ is the graph of $y = x$ translated up 5 units.

- ___ 30. Which of the following statements is true about the graphs of $f(x) = x$ and $g(x) = f(x + 7)$?
- $g(x)$ is the graph of $f(x)$ translated 7 units down.
 - $g(x)$ and $f(x)$ have the same y-intercept.
 - $g(x)$ is the graph of $f(x)$ translated 7 units to the left.
 - $g(x)$ is the graph of $f(x)$ translated 7 units to the right.
- ___ 31. Which function's graph is a translation of the graph of $f(x) = x$ shifted 7 units to the left?
- $g(x) = -7x$
 - $g(x) = x + 7$
 - $g(x) = 7x$
 - $g(x) = x - 7$
- ___ 32. Which function's graph is a translation of the graph of $f(x) = x$ shifted 5 units to the right?
- $g(x) = 5x$
 - $g(x) = x - 5$
 - $g(x) = x + 5$
 - $g(x) = -5x$
- ___ 33. If a function, $f(x)$ is shifted to the left four unit(s), what function represents the transformation?
- $f(x - 4)$
 - $f(x) - 4$
 - $f(x + 4)$
 - $f(x) + 4$
- ___ 34. Which of the following statements is true about the graphs of $f(x) = x$ and $g(x) = f(5x)$?
- The graph of $g(x)$ is steeper than the graph of $f(x)$.
 - The graph of $g(x)$ is less steep than the graph of $f(x)$.
 - The graphs of $g(x)$ and $f(x)$ have different y-intercepts.
 - The graphs of $g(x)$ and $f(x)$ have the same slope.
- ___ 35. The function $g(x)$ is a transformation of the function $f(x)$. Which of the following correctly describes $f(x)$ and $g(x)$?



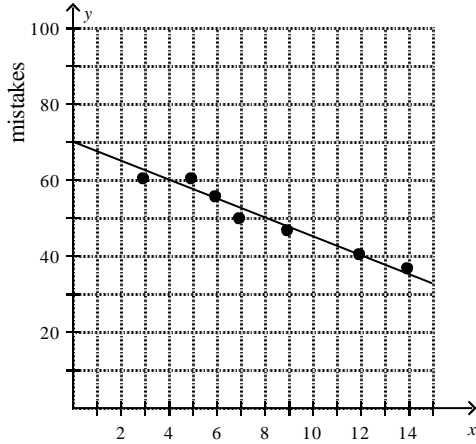
- $f(x) = 2x + 2$; $g(x) = 3f(x)$
- $f(x) = 2x + 2$; $g(x) = f(3x)$
- $f(x) = 2x + 2$; $g(x) = -3f(x)$
- $f(x) = 2x + 2$; $g(x) = f(-3x)$

Tell whether the sequence is arithmetic. If it is, what is the common difference?

b. $y = -\frac{1}{2}x$

d. $y = -2x$

40. The scatter plot shows the number of mistakes a piano student makes during a recital versus the amount of time the student practiced for the recital. How many mistakes do you expect the student to make at the recital after 6 hours of practicing?

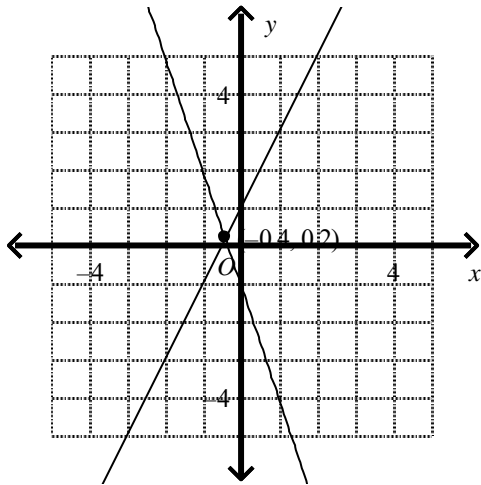


- a. 55 mistakes
 b. 37 mistakes
 c. 63 mistakes
 d. 45 mistakes

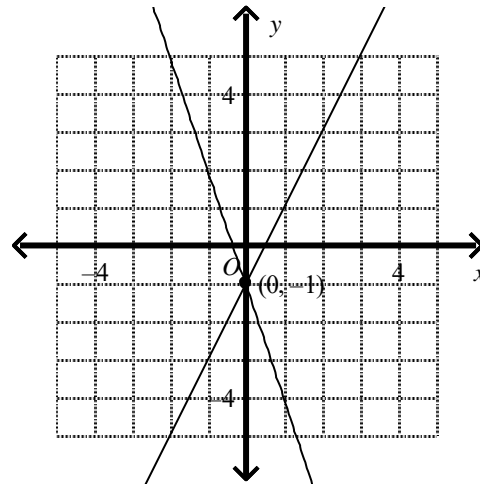
What is the solution of the system? Use a graph.

41. $y = 2x + 1$
 $y = -3x - 1$

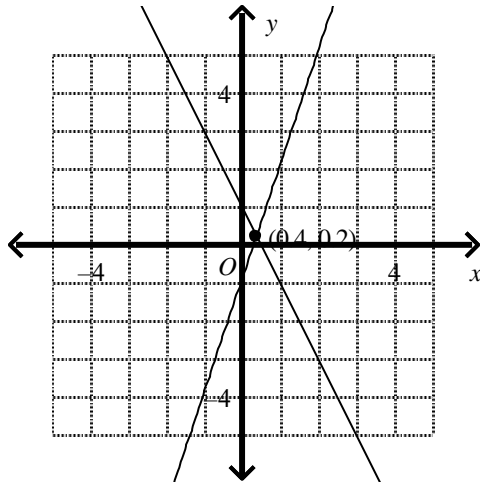
a.



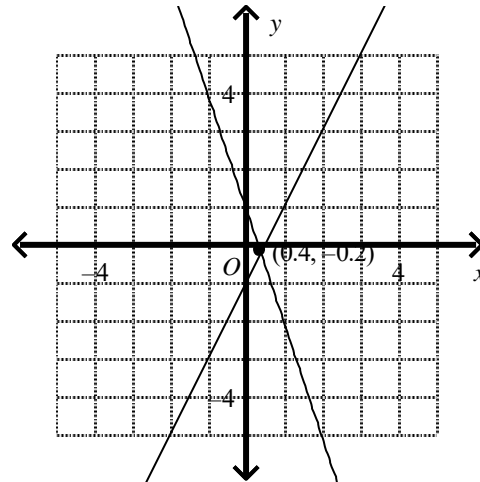
c.



b.



d.



How many solutions does the system have?

- ___ 42. $x = -4y + 4$
 $2x + 8y = 8$
 a. one solution
 b. two solutions

- c. infinitely many solutions
 d. no solution

- ___ 43. $y = 6x + 2$
 $3y - 18x = 12$
 a. one solution
 b. two solutions

- c. infinitely many solutions
 d. no solution

How many solutions does the system have?

- ___ 44. $x - 2y = 6$
 $3x - 6y = 18$
 a. one solution
 b. two solutions

- c. infinitely many solutions
 d. no solution

- ___ 45. $y - 5x = -6$
 $3y - 15x = -12$
 a. one solution
 b. two solutions

- c. infinitely many solutions
 d. no solution

- ___ 46. Which solution is best found solving the system by substitution over graphing?
 a. $(2, -5)$
 b. $(0, 0)$
 c. $\left(\frac{6}{11}, -\frac{9}{11}\right)$
 d. $\left(-10, -\frac{1}{2}\right)$

- ___ 47. Sander sold 46 car wash tickets for a total of \$350. Some were basic car wash tickets that cost \$5.50, and some were deluxe tickets that cost \$8.00.

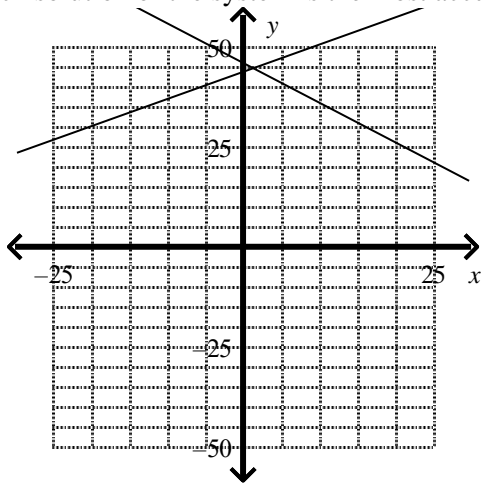
Let x be the number of basic car wash tickets.
 Let y be the number of deluxe car wash tickets.

$$x + y = 46$$

$$5.5x + 8y = 350$$

Which solution of the system is the most accurate?

a.



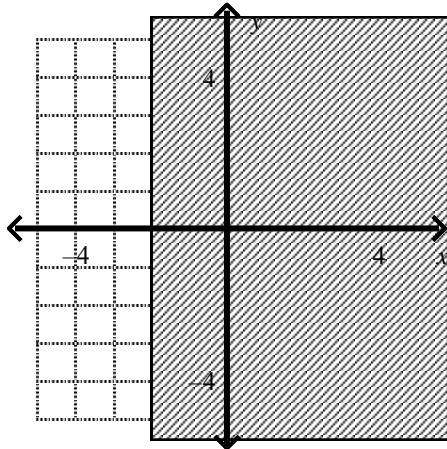
b. $(7, 39)$

c. $\left(\frac{36}{5}, \frac{194}{5}\right)$

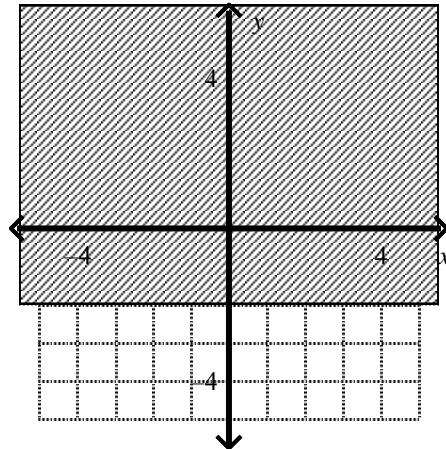
What is the graph of the inequality in the coordinate plane?

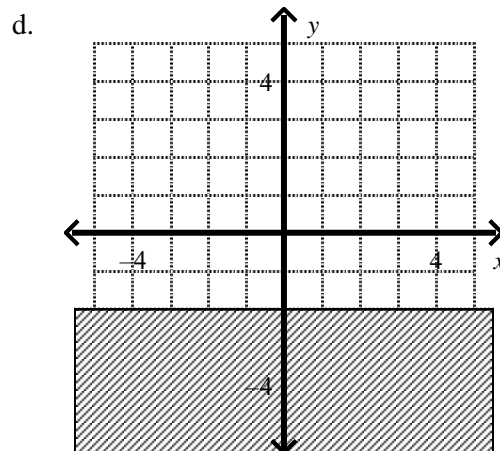
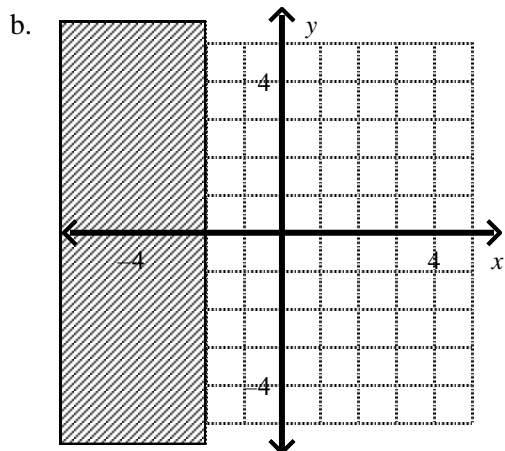
48. $y < -2$

a.

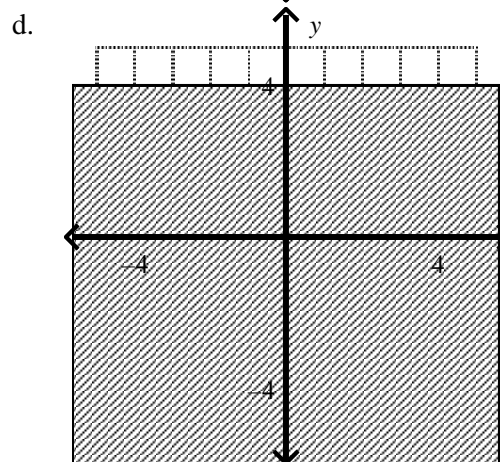
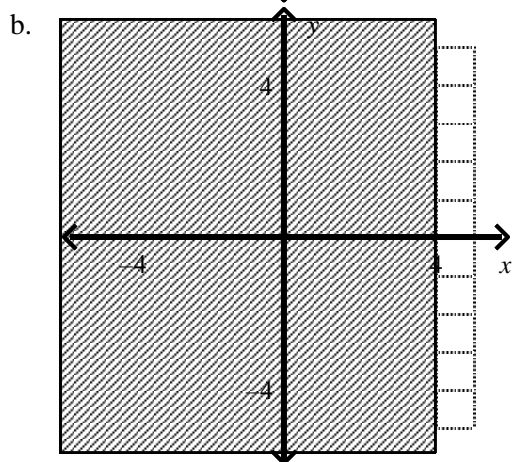
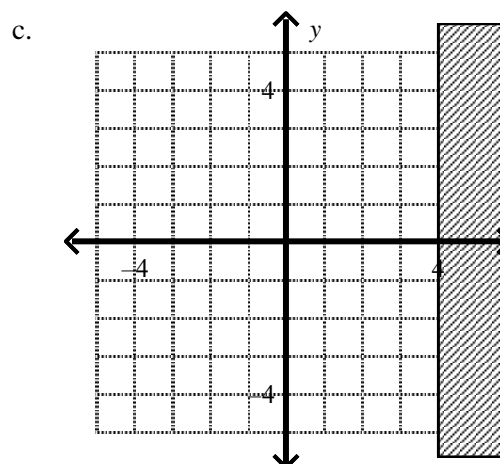
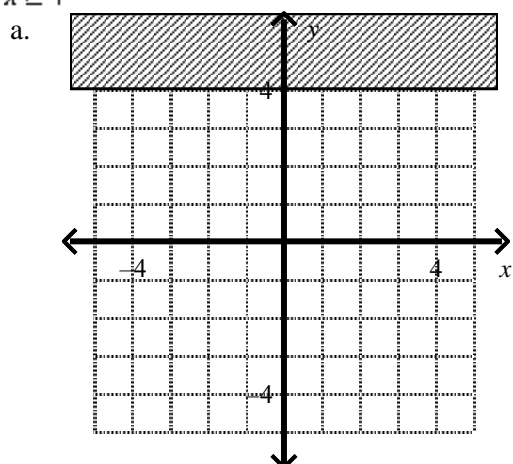


c.





49. $x \geq 4$



50. Which inequality will use a solid line in its solution graph?

a. $y < 2x$

c. $y \leq 2x + 4$

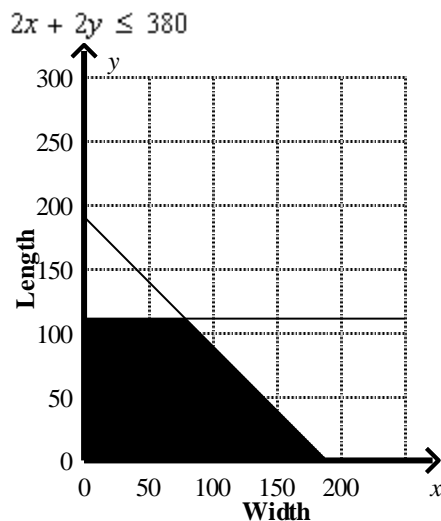
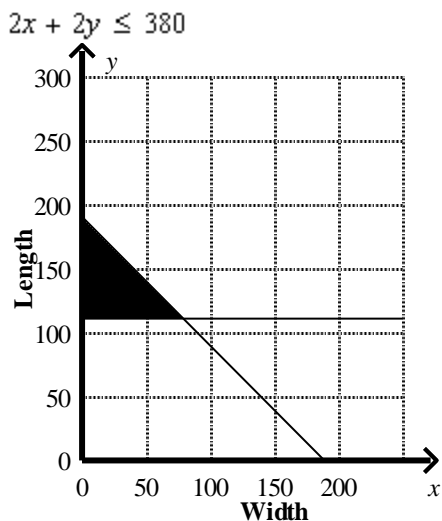
b. $y > x$

d. $y > 2x - 5$

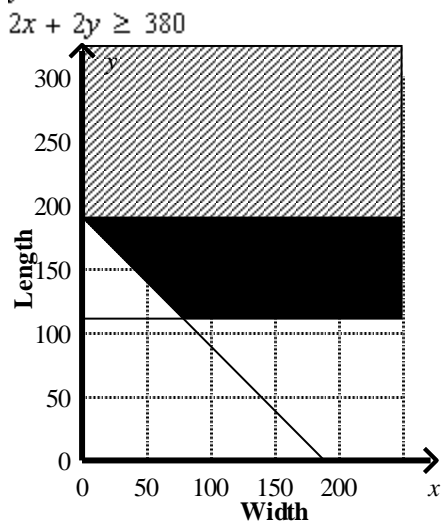
51. A local citizen wants to fence a rectangular community garden. The length of the garden should be at least 110 ft, and the distance around should be no more than 380 ft. Write a system of inequalities that models the possible dimensions of the garden. Graph the system to show all possible solutions.

a. $y \geq 110$

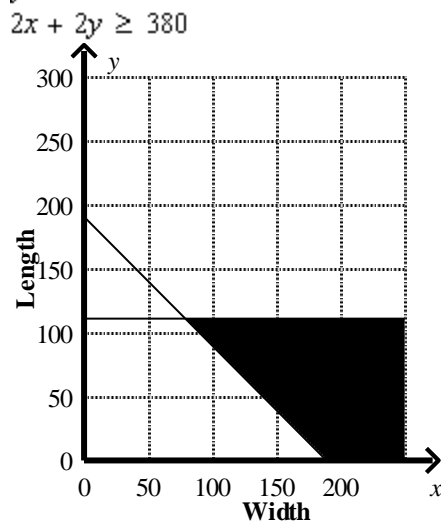
c. $y \leq 110$



b. $y \geq 110$



d. $y \leq 110$



52. A biologist studied the populations of white-sided jackrabbits and black-tailed jackrabbits over a 5-year period. The biologist modeled the populations, in thousands, with the following polynomials where x is time, in years.

White-sided jackrabbits: $9.7x^2 - 0.8x + 2.3$

Black-tailed jackrabbits: $-1.1x^2 + 7.7x + 5.4$

What polynomial models the total number of white-sided and black-tailed jackrabbits?

a. $-8.6x^2 + 6.9x - 7.7$

c. $8.6x^2 + 6.9x + 7.7$

b. $8.6x^2 - 6.9x + 7.7$

d. $8.6x^2 - 6.9x - 7.7$

Simplify the product using a table.

53. $(-5h + 4)(5h - 5)$

	$5h$	-5
$-5h$		
4		

a. $-25h^2 + 45h - 20$

c. $-25h^2 - 5h + 20$

b. $-25h^2 - 45h - 20$

d. $-25h^2 + 5h + 20$

54. $(2h - 5)(4h - 3)$

	$4h$	-3
$2h$		
-5		

a. $8h^2 - 26h + 15$

c. $8h^2 - 14h - 15$

b. $8h^2 + 26h + 15$

d. $8h^2 + 14h - 15$

55. A sports team is building a new stadium on a rectangular lot of land. If the lot measures $7x$ by $7x$ and the sports field will be $5x$ by $5x$, how much of the lot will be left over to build bleachers on?

a. $4x^2$

c. $74x^2$

b. $24x^2$

d. $49x^2 - 25x^2$

56. A family is having a pool built in their backyard. If their yard is rectangular and measures $10x$ by $10x$ and the pool is circular with a radius of $2x$ how much of the yard will be left over after the pool is built? Write your answer in factored form.

a. $(100 - 4\pi)x^2$

c. $100x^2 - 4\pi x^2$

b. $100x^2 + 4\pi x^2$

d. $(100 + 4\pi)x^2$

57. The area of a rectangular painting is given by the trinomial $x^2 + 4x - 60$. What are the possible dimensions of the painting? Use factoring.

a. $x - 6$ and $x + 10$

c. $x - 6$ and $x - 10$

b. $x + 6$ and $x - 10$

d. $x + 6$ and $x + 10$

58. The area of a rectangular garden is given by the trinomial $x^2 + x - 42$. What are the possible dimensions of the rectangle? Use factoring.

a. $x - 6$ and $x + 7$

c. $x - 6$ and $x - 7$

b. $x + 6$ and $x - 7$

d. $x + 6$ and $x + 7$

59. The area of a rectangular pool is given by the trinomial $4y^2 + 3y - 10$. What are the possible dimensions of the pool? Use factoring.

a. $y - 1$ and $4y - 5$

c. $-y + 2$ and $-4y + 5$

b. $y - 2$ and $4y + 5$

d. $y + 2$ and $4y - 5$

60. A carpenter is putting a skylight in a roof. If the roof measures $8x + 2$ by $5x + 4$ and the skylight measures $5x + 5$ by $3x + 6$, what is the area of the remaining roof after the skylight is built. Put your answer in factored form.

a. $(25x - 1)^2$

c. $(25x + 22)^2$

b. $(25x - 22)(x + 1)$

d. $(25x + 22)(x - 1)$

61. The area of a rectangular barnyard is given by the trinomial $4x^2 + 8x - 21$. What are the possible dimensions of the barnyard? Use factoring.

a. $-2x + 7$ and $-2x + 3$

c. $2x - 2$ and $2x - 3$

b. $2x - 7$ and $2x + 3$

d. $2x + 7$ and $2x - 3$

62. Which expression is equivalent to $\sqrt{75}$?

a. $\sqrt{70} \sqrt{5}$

c. $3\sqrt{25}$

b. $\sqrt{3}\sqrt{5}$

d. $5\sqrt{3}$

What is the number of real solutions?

- ___ 63. $-4x^2 - 4 = 8x$
a. one solution
b. two solutions
c. no real solutions
d. cannot be determined
- ___ 64. $-x^2 + 9x + 7 = 0$
a. one solution
b. no real solutions
c. two solutions
d. cannot be determined
- ___ 65. $8x^2 - 11x = -3$
a. one real solution
b. two real solutions
c. no real solutions
d. cannot be determined
- ___ 66. $x^2 = -7x + 7$
a. one solution
b. no real solutions
c. two solutions
d. cannot be determined
- ___ 67. During a manufacturing process, a metal part in a machine is exposed to varying temperature conditions. The manufacturer of the machine recommends that the temperature of the machine part remain below 132°F . The temperature T in degrees Fahrenheit x minutes after the machine is put into operation is modeled by $T = -0.005x^2 + 0.45x + 125$. Will the temperature of the part ever reach or exceed 132°F ? Use the discriminant of a quadratic equation to decide.
a. no
b. yes

How many real-number solutions does the equation have?

- ___ 68. $5x^2 + 10x + 8 = 0$
a. one solution
b. two solutions
c. no solutions
d. infinitely many solutions
- ___ 69. $-10x^2 - 4x + 2 = 0$
a. one solution
b. two solutions
c. no solutions
d. infinitely many solutions
- ___ 70. $8x^2 + 8x + 2 = 0$
a. one solution
b. two solutions
c. no solutions
d. infinitely many solutions

Alg. 2 Hon. Summer Assignment Answer Section

- ANS: C PTS: 1 DIF: L2 REF: 1-1 Operations on Real Numbers
OBJ: 1-1.1 Find the sum or product of two rational numbers and explain why the sum or product is rational.
NAT: HSA.REI.B.3 STA: MFAS.912.HSA.REI.2.3
TOP: 1-1 Example 1 Understand Sets and Subsets KEY: set-builder notation | roster form
- ANS: A PTS: 1 DIF: L3 REF: 1-1 Operations on Real Numbers
OBJ: 1-1.1 Find the sum or product of two rational numbers and explain why the sum or product is rational.
NAT: HSN.RN.B.3 STA: MFAS.912.HSN.RN.2.3
TOP: 1-1 Example 1 Understand Sets and Subsets
KEY: natural numbers | whole numbers | integers | rational numbers | irrational numbers
- ANS: B PTS: 1 DIF: L3 REF: 1-1 Operations on Real Numbers
OBJ: 1-1.1 Find the sum or product of two rational numbers and explain why the sum or product is rational.
NAT: HSN.RN.B.3 STA: MFAS.912.HSN.RN.2.3
TOP: 1-1 Example 3 Operations with Rational Numbers KEY: opposites | additive inverses
- ANS: B PTS: 1 DIF: L3
REF: 1-3 Solving Equations with a Variable on Both Sides
OBJ: 1-3.2 Identify whether linear equations have one solution, infinitely many solutions, or no solution.
NAT: HSA.CED.A.1| HSA.REI.A.1| HSA.REI.B.3
STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-3 Example 2 Understand Equations With Infinitely Many or No Solutions
KEY: identity | no solution
- ANS: D PTS: 1 DIF: L3
REF: 1-3 Solving Equations with a Variable on Both Sides
OBJ: 1-3.2 Identify whether linear equations have one solution, infinitely many solutions, or no solution.
NAT: HSA.CED.A.1| HSA.REI.A.1| HSA.REI.B.3
STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-3 Example 2 Understand Equations With Infinitely Many or No Solutions
KEY: identity | no solution
- ANS: C PTS: 1 DIF: L3
REF: 1-3 Solving Equations with a Variable on Both Sides
OBJ: 1-3.2 Identify whether linear equations have one solution, infinitely many solutions, or no solution.
NAT: HSA.CED.A.1| HSA.REI.A.1| HSA.REI.B.3
STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-3 Example 2 Understand Equations With Infinitely Many or No Solutions
KEY: identity | no solution
- ANS: C PTS: 1 DIF: L3
REF: 1-3 Solving Equations with a Variable on Both Sides
OBJ: 1-3.2 Identify whether linear equations have one solution, infinitely many solutions, or no solution.
NAT: HSA.CED.A.1| HSA.REI.A.1| HSA.REI.B.3
STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-3 Example 2 Understand Equations With Infinitely Many or No Solutions
KEY: identity | no solution
- ANS: A PTS: 1 DIF: L3 REF: 1-4 Literal Equations and Formulas
OBJ: 1-4.2 Use formulas and equations to solve problems.
NAT: HSN.Q.A.1| HSA.CED.A.1| HSA.CED.A.4| HSA.REI.A.1| HSA.REI.B.3
STA: MFAS.912.HSN.Q.1.1| MFAS.912.HSA.CED.1.1| MFAS.912.HSA.CED.1.4|
MFAS.912.HSA.REI.1.1| MFAS.912.HSA.REI.2.3 TOP: 1-4 Example 4 Apply Formulas
KEY: literal equation | formula

9. ANS: D PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.REI.B.3
STA: MFAS.912.HSA.REI.2.3 TOP: 1-5 Example 1 Solve Inequalities
KEY: solution of an inequality
10. ANS: D PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.REI.B.3
STA: MFAS.912.HSA.REI.2.3 TOP: 1-5 Example 1 Solve Inequalities
KEY: solution of an inequality
11. ANS: D PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.REI.B.3
STA: MFAS.912.HSA.REI.2.3 TOP: 1-5 Example 1 Solve Inequalities
KEY: solution of an inequality
12. ANS: A PTS: 1 DIF: L2
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.REI.B.3
STA: MFAS.912.HSA.REI.2.3 TOP: 1-5 Example 1 Solve Inequalities
KEY: solution of an inequality
13. ANS: A PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.REI.B.3
STA: MFAS.912.HSA.REI.2.3 TOP: 1-5 Example 1 Solve Inequalities
KEY: solution of an inequality
14. ANS: C PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.CED.A.1| HSA.REI.B.3
STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-5 Example 2 Solve an Inequality With Variables on Both Sides
15. ANS: D PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.CED.A.1| HSA.REI.B.3
STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-5 Example 2 Solve an Inequality With Variables on Both Sides
16. ANS: A PTS: 1 DIF: L3
REF: 1-5 Solving Inequalities in One Variable
OBJ: 1-5.1 Create and solve inequalities in one variable. NAT: HSA.REI.B.3
STA: MFAS.912.HSA.REI.2.3 TOP: 1-5 Example 1 Solve Inequalities
KEY: set-builder notation
17. ANS: C PTS: 1 DIF: L3 REF: 1-6 Compound Inequalities
OBJ: 1-6.2 Interpret the solution to a compound inequality within a modeling context.
NAT: HSA.CED.A.1| HSA.REI.B.3 STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-6 Example 3 Solve a Compound Inequality Involving And
KEY: compound inequality
18. ANS: C PTS: 1 DIF: L3 REF: 1-6 Compound Inequalities
OBJ: 1-6.2 Interpret the solution to a compound inequality within a modeling context.
NAT: HSA.CED.A.1| HSA.REI.B.3 STA: MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.3
TOP: 1-6 Example 2 Solve a Compound Inequality Involving Or
KEY: compound inequality

19. ANS: D PTS: 1 DIF: L3 REF: 2-2 Point-Slope Form
 OBJ: 2-2.1 Write and graph linear equations in point-slope form.
 NAT: HSA.SSE.A.1a| HSA.SSE.A.2| HSA.SSE.B.3| HSA.CED.A.2
 STA: MFAS.912.HSA.SSE.1.1a| MFAS.912.HSA.SSE.1.2| MFAS.912.HSA.SSE.2.3|
 MFAS.912.HSA.CED.1.2
 TOP: 2-2 Example 1 Understand Point-Slope Form of a Linear Equation
 KEY: point-slope form
20. ANS: D PTS: 1 DIF: L3 REF: 2-3 Standard Form
 OBJ: 2-3.1 Write and graph linear equations in standard form.
 NAT: HSN.Q.A.2| HSA.SSE.A.2| HSA.CED.A.2| HSF.IF.B.4| HSF.IF.C.7.a| HSF.IF.C.9| HSF.BF.A.1.a
 STA: MFAS.912.HSN.Q.1.2| MFAS.912.HSA.SSE.1.2| MFAS.912.HSA.CED.1.2| MFAS.912.HSF.IF.2.4|
 MFAS.912.HSF.IF.3.7.a| MFAS.912.HSF.IF.3.9| MFAS.912.HSF.BF.1.1.a
 TOP: 2-3 Example 2 Graph a Line Using Intercepts KEY: standard form of a linear equation
21. ANS: B PTS: 1 DIF: L4 REF: 2-3 Standard Form
 OBJ: 2-3.1 Write and graph linear equations in standard form.
 NAT: HSN.Q.A.2| HSA.SSE.A.2| HSA.CED.A.2| HSF.IF.B.4| HSF.IF.C.7.a| HSF.IF.C.9| HSF.BF.A.1.a
 STA: MFAS.912.HSN.Q.1.2| MFAS.912.HSA.SSE.1.2| MFAS.912.HSA.CED.1.2| MFAS.912.HSF.IF.2.4|
 MFAS.912.HSF.IF.3.7.a| MFAS.912.HSF.IF.3.9| MFAS.912.HSF.BF.1.1.a
 TOP: 2-3 Example 2 Graph a Line Using Intercepts KEY: standard form of a linear equation
22. ANS: C PTS: 1 DIF: L3 REF: 2-3 Standard Form
 OBJ: 2-3.1 Write and graph linear equations in standard form. NAT: HSA.SSE.A.1.A
 STA: MFAS.912.HSA.SSE.1.1.A
 TOP: 2-3 Example 1 Understand Standard Form of a Linear Equation
 KEY: standard form of a linear equation
23. ANS: A PTS: 1 DIF: L3 REF: 2-3 Standard Form
 OBJ: 2-3.1 Write and graph linear equations in standard form. NAT: HSA.REI.A.10| HSA.SSE.A.1.A
 STA: MFAS.912.HSA.REI.1.10| MFAS.912.HSA.SSE.1.1.A
 TOP: 2-3 Example 3 Relate Standard Form to Horizontal and Vertical Lines
 KEY: standard form of a linear equation
24. ANS: C PTS: 1 DIF: L3 REF: 2-3 Standard Form
 OBJ: 2-3.1 Write and graph linear equations in standard form. NAT: HSA.REI.A.10| HSA.SSE.A.1.A
 STA: MFAS.912.HSA.REI.1.10| MFAS.912.HSA.SSE.1.1.A
 TOP: 2-3 Example 3 Relate Standard Form to Horizontal and Vertical Lines
 KEY: standard form of a linear equation
25. ANS: A PTS: 1 DIF: L3 REF: 2-3 Standard Form
 OBJ: 2-3.2 Use linear equations in standard form to interpret both the x- and y-intercepts in the context of
 given data. NAT: HSA.SSE.A.1.A STA: MFAS.912.HSA.SSE.1.1.A
 TOP: 2-3 Example 4 Use the Standard Form of a Linear Equation
 KEY: standard form of a linear equation
26. ANS: B PTS: 1 DIF: L3 REF: 3-1 Relations and Functions
 OBJ: 3-1.1 Understand that a relation is a function if each element of the domain is assigned to exactly one
 element in the range. NAT: HSF.IF.A.1| HSF.IF.A.2
 STA: MFAS.912.HSF.IF.1.1| MFAS.912.HSF.IF.1.2
 TOP: 3-1 Example 3 Classify Relations and Functions KEY: relation | domain | range
27. ANS: D PTS: 1 DIF: L3 REF: 3-1 Relations and Functions
 OBJ: 3-1.1 Understand that a relation is a function if each element of the domain is assigned to exactly one
 element in the range. NAT: HSF.IF.A.1| HSF.IF.A.2
 STA: MFAS.912.HSF.IF.1.1| MFAS.912.HSF.IF.1.2
 TOP: 3-1 Example 3 Classify Relations and Functions KEY: relation | domain | range
28. ANS: A PTS: 1 DIF: L2 REF: 3-2 Linear Functions

- OBJ: 3-2.1 Write and evaluate linear functions using function notation.
 NAT: HSF.IF.A.1| HSF.IF.A.2 STA: MFAS.912.HSF.IF.1.1| MFAS.912.HSF.IF.1.2
 TOP: 3-2 Example 1 Evaluate Functions in Function Notation KEY: function notation
29. ANS: B PTS: 1 DIF: L2 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.C.7| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 1 Vertical Translations of Linear Functions
 KEY: translation | effect of a constant k on $f(x)$; $f(x) + k$
30. ANS: C PTS: 1 DIF: L3 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.B.5| HSF.IF.C.7| HSF.BF.A.1| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.2.5| MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.1.1| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 2 Horizontal Translations of Linear Functions
 KEY: transformation | translation
31. ANS: B PTS: 1 DIF: L3 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.B.5| HSF.IF.C.7| HSF.BF.A.1| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.2.5| MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.1.1| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 2 Horizontal Translations of Linear Functions
 KEY: transformation | translation
32. ANS: B PTS: 1 DIF: L3 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.B.5| HSF.IF.C.7| HSF.BF.A.1| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.2.5| MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.1.1| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 2 Horizontal Translations of Linear Functions
 KEY: transformation | translation
33. ANS: C PTS: 1 DIF: L2 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.C.7| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 2 Horizontal Translations of Linear Functions
 KEY: translation | transformation
34. ANS: A PTS: 1 DIF: L3 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.B.5| HSF.IF.C.7| HSF.BF.A.1| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.2.5| MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.1.1| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 3 Stretches and Compressions of Linear Functions
 KEY: transformation
35. ANS: B PTS: 1 DIF: L3 REF: 3-3 Transforming Linear Functions
 OBJ: 3-3.2 Interpret the key features of the graph of a linear function and use them to write the function that the graph represents.
 NAT: HSF.IF.B.5| HSF.IF.C.7| HSF.BF.A.1| HSF.BF.B.3
 STA: MFAS.912.HSF.IF.2.5| MFAS.912.HSF.IF.3.7| MFAS.912.HSF.BF.1.1| MFAS.912.HSF.BF.2.3
 TOP: 3-3 Example 3 Stretches and Compressions of Linear Functions
 KEY: transformation
36. ANS: D PTS: 1 DIF: L3 REF: 3-4 Arithmetic Sequences
 OBJ: 3-4.1 Write arithmetic and geometric sequences both recursively and with an explicit formula.
 NAT: HSA.SSE.A.1.a| HSA.SSE.A.1.b| HSF.IF.A.3| HSF.BF.A.1.a| HSF.BF.A.2| HSF.IF.B.6
 STA: MFAS.912.HSA.SSE.1.1.a| MFAS.912.HSA.SSE.1.1.b| MFAS.912.HSF.IF.1.3|
 MFAS.912.HSF.BF.1.1.a| MFAS.912.HSF.BF.1.2| MFAS.912.HSF.IF.2.6

- TOP: 3-4 Example 1 Connect Sequences and Functions
KEY: sequence | arithmetic sequence | common difference
37. ANS: B PTS: 1 DIF: L4 REF: 3-4 Arithmetic Sequences
OBJ: 3-4.2 Use explicit formulas and recursive formulas to model real-world situations.
NAT: HSA.SSE.A.1.a| HSA.SSE.A.1.b| HSF.IF.A.3| HSF.BF.A.1.a| HSF.BF.A.2| HSF.IF.B.6
STA: MFAS.912.HSA.SSE.1.1.a| MFAS.912.HSA.SSE.1.1.b| MFAS.912.HSF.IF.1.3|
MFAS.912.HSF.BF.1.1.a| MFAS.912.HSF.BF.1.2| MFAS.912.HSF.IF.2.6
TOP: 3-4 Example 3 Apply the Explicit Formula
KEY: sequence | arithmetic sequence | explicit formula | common difference
38. ANS: C PTS: 1 DIF: L3 REF: 3-5 Scatter Plots and Lines of Fit
OBJ: 3-5.2 Interpret the slope of a trend line within the context of data.
NAT: HSN.Q.A.1| HSS.ID.B.6| HSS.ID.B.6.a| HSS.ID.B.6.c| HSS.ID.C.7| HSS.ID.C.8| HSS.ID.C.9
STA: MFAS.912.HSN.Q.1.1| MFAS.912.HSS.ID.2.6| MFAS.912.HSS.ID.2.6.a| MFAS.912.HSS.ID.2.6.c|
MFAS.912.HSS.ID.3.7| MFAS.912.HSS.ID.3.8| MFAS.912.HSS.ID.3.9
TOP: 3-5 Example 4 Interpret Trend Lines KEY: scatter plot | trend line
39. ANS: A PTS: 1 DIF: L4 REF: 3-5 Scatter Plots and Lines of Fit
OBJ: 3-5.2 Interpret the slope of a trend line within the context of data.
NAT: HSN.Q.A.1| HSS.ID.B.6| HSS.ID.B.6.a| HSS.ID.B.6.c| HSS.ID.C.7| HSS.ID.C.8| HSS.ID.C.9
STA: MFAS.912.HSN.Q.1.1| MFAS.912.HSS.ID.2.6| MFAS.912.HSS.ID.2.6.a| MFAS.912.HSS.ID.2.6.c|
MFAS.912.HSS.ID.3.7| MFAS.912.HSS.ID.3.8| MFAS.912.HSS.ID.3.9
TOP: 3-5 Example 3 Write the Equation of a Trend Line KEY: scatter plot | trend line
40. ANS: A PTS: 1 DIF: L3 REF: 3-5 Scatter Plots and Lines of Fit
OBJ: 3-5.2 Interpret the slope of a trend line within the context of data.
NAT: HSN.Q.A.1| HSS.ID.B.6| HSS.ID.B.6.a| HSS.ID.B.6.c| HSS.ID.C.7| HSS.ID.C.8| HSS.ID.C.9
STA: MFAS.912.HSN.Q.1.1| MFAS.912.HSS.ID.2.6| MFAS.912.HSS.ID.2.6.a| MFAS.912.HSS.ID.2.6.c|
MFAS.912.HSS.ID.3.7| MFAS.912.HSS.ID.3.8| MFAS.912.HSS.ID.3.9
TOP: 3-5 Example 4 Interpret Trend Lines KEY: scatter plot | trend line
41. ANS: A PTS: 1 DIF: L2
REF: 4-1 Solving Systems of Equations by Graphing
OBJ: 4-1.1 Graph systems of linear equations in two variables to find an approximate solution.
NAT: HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.6
TOP: 4-1 Example 1 Solve a System of Equations by Graphing
KEY: system of linear equations | approximate solution of a system of linear equations | consistent |
independent
42. ANS: C PTS: 1 DIF: L3
REF: 4-2 Solving Systems of Equations by Substitution
OBJ: 4-2.1 Use the substitution method to solve systems of equations.
NAT: HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.6
TOP: 4-2 Example 3 Systems With Infinitely Many Solutions or No Solution
KEY: substitution method
43. ANS: D PTS: 1 DIF: L3
REF: 4-2 Solving Systems of Equations by Substitution
OBJ: 4-2.1 Use the substitution method to solve systems of equations.
NAT: HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.6
TOP: 4-2 Example 3 Systems With Infinitely Many Solutions or No Solution
KEY: substitution method
44. ANS: C PTS: 1 DIF: L3
REF: 4-2 Solving Systems of Equations by Substitution
OBJ: 4-2.1 Use the substitution method to solve systems of equations.
NAT: HSA.REI.C.5| HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.5| MFAS.912.HSA.REI.3.6

- TOP: 4-2 Example 3 Systems With Infinitely Many Solutions or No Solution
KEY: elimination method | exact solution of a system of linear equations
45. ANS: D PTS: 1 DIF: L3
REF: 4-2 Solving Systems of Equations by Substitution
OBJ: 4-2.1 Use the substitution method to solve systems of equations.
NAT: HSA.REI.C.5| HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.5| MFAS.912.HSA.REI.3.6
TOP: 4-2 Example 3 Systems With Infinitely Many Solutions or No Solution
KEY: elimination method | exact solution of a system of linear equations
46. ANS: C PTS: 1 DIF: L3
REF: 4-2 Solving Systems of Equations by Substitution
OBJ: 4-2.1 Use the substitution method to solve systems of equations.
NAT: HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.6
TOP: 4-2 Example 2 Compare Graphing and Substitution Methods
KEY: substitution method | exact solution of a system of linear equations
47. ANS: C PTS: 1 DIF: L2
REF: 4-2 Solving Systems of Equations by Substitution
OBJ: 4-2.1 Use the substitution method to solve systems of equations.
NAT: HSA.REI.C.6 STA: MFAS.912.HSA.REI.3.6
TOP: 4-2 Example 2 Compare Graphing and Substitution Methods
KEY: substitution method | exact solution of a system of linear equations
48. ANS: D PTS: 1 DIF: L3
REF: 4-4 Linear Inequalities in Two Variables
OBJ: 4-4.2 Represent constraints with inequalities and interpret solutions as viable or nonviable options in a modeling context. NAT: HSA.CED.A.3| HSA.REI.A.12
STA: MFAS.912.HSA.CED.1.3| MFAS.912.HSA.REI.1.12
TOP: 4-4 Example 4 Inequalities in One Variable in the Coordinate Plane
KEY: linear inequality
49. ANS: C PTS: 1 DIF: L3
REF: 4-4 Linear Inequalities in Two Variables
OBJ: 4-4.2 Represent constraints with inequalities and interpret solutions as viable or nonviable options in a modeling context. NAT: HSA.CED.A.3| HSA.REI.A.12
STA: MFAS.912.HSA.CED.1.3| MFAS.912.HSA.REI.1.12
TOP: 4-4 Example 4 Inequalities in One Variable in the Coordinate Plane
KEY: linear inequality
50. ANS: C PTS: 1 DIF: L2
REF: 4-4 Linear Inequalities in Two Variables
OBJ: 4-4.2 Represent constraints with inequalities and interpret solutions as viable or nonviable options in a modeling context. NAT: HSA.CED.A.3| HSA.REI.A.12
STA: MFAS.912.HSA.CED.1.3| MFAS.912.HSA.REI.1.12
TOP: 4-4 Example 4 Inequalities in One Variable in the Coordinate Plane
KEY: linear inequality
51. ANS: A PTS: 1 DIF: L3 REF: 4-5 Systems of Linear Inequalities
OBJ: 4-5.2 Interpret solutions of linear inequalities in a modeling context.
NAT: HSA.REI.A.12 STA: MFAS.912.HSA.REI.1.12
TOP: 4-5 Example 3 Use a System of Inequalities
KEY: system of linear inequalities | solution of a system of linear inequalities
52. ANS: C PTS: 1 DIF: L4
REF: 7-1 Adding and Subtracting Polynomials
OBJ: 7-1.4 Add or subtract two polynomials. NAT: HSA.APR.A.1
STA: MFAS.912.HSA.APR.1.1 TOP: 7-1 Example 6 Apply Polynomials

- KEY: polynomial | trinomial | standard form of a polynomial
53. ANS: A PTS: 1 DIF: L3 REF: 7-2 Multiplying Polynomials
 OBJ: 7-2.2 Multiply polynomials using a table and an area model.
 NAT: HSA.APR.A.1 STA: MFAS.912.HSA.APR.1.1
 TOP: 7-2 Example 2 Use a Table to Find the Product of Polynomials
 KEY: multiplying binomials
54. ANS: A PTS: 1 DIF: L3 REF: 7-2 Multiplying Polynomials
 OBJ: 7-2.2 Multiply polynomials using a table and an area model.
 NAT: HSA.APR.A.1 STA: MFAS.912.HSA.APR.1.1
 TOP: 7-2 Example 2 Use a Table to Find the Product of Polynomials
 KEY: multiplying binomials
55. ANS: B PTS: 1 DIF: L3 REF: 7-4 Factoring Polynomials
 OBJ: 7-4.3 Factor polynomials that represent real-world problems.
 NAT: HSA.APR.A.1 STA: MFAS.912.HSA.APR.1.1
 TOP: 7-4 Example 3 Factor a Polynomial Model
56. ANS: A PTS: 1 DIF: L3 REF: 7-4 Factoring Polynomials
 OBJ: 7-4.3 Factor polynomials that represent real-world problems.
 NAT: HSA.APR.A.1 STA: MFAS.912.HSA.APR.1.1
 TOP: 7-4 Example 3 Factor a Polynomial Model
57. ANS: A PTS: 1 DIF: L3 REF: 7-5 Factoring $x^2 + bx + c$
 OBJ: 7-5.1 Factor a trinomial in the form $x^2 + bx + c$ by finding two binomial factors whose product is equal to the trinomial.
 NAT: HSA.SSE.A.1.a
 STA: MFAS.912.HSA.SSE.1.1.a TOP: 7-5 Example 5 Apply Factoring Trinomials
58. ANS: A PTS: 1 DIF: L3 REF: 7-5 Factoring $x^2 + bx + c$
 OBJ: 7-5.1 Factor a trinomial in the form $x^2 + bx + c$ by finding two binomial factors whose product is equal to the trinomial.
 NAT: HSA.SSE.A.1.a
 STA: MFAS.912.HSA.SSE.1.1.a TOP: 7-5 Example 5 Apply Factoring Trinomials
59. ANS: D PTS: 1 DIF: L3 REF: 7-6 Factoring $ax^2 + bx + c$
 OBJ: 7-6.2 Write a quadratic trinomial as a product of two binomial factors.
 NAT: HSA.SSE.A.1.a| HSA.SSE.A.1.b STA: MFAS.912.HSA.SSE.1.1.a| MFAS.912.HSA.SSE.1.1.b
 TOP: 7-6 Example 2 Understand Factoring by Grouping
60. ANS: D PTS: 1 DIF: L4 REF: 7-6 Factoring $ax^2 + bx + c$
 OBJ: 7-6.2 Write a quadratic trinomial as a product of two binomial factors.
 NAT: HSA.SSE.A.1.a| HSA.SSE.A.1.b STA: MFAS.912.HSA.SSE.1.1.a| MFAS.912.HSA.SSE.1.1.b
 TOP: 7-6 Example 2 Understand Factoring by Grouping
61. ANS: D PTS: 1 DIF: L3 REF: 7-6 Factoring $ax^2 + bx + c$
 OBJ: 7-6.2 Write a quadratic trinomial as a product of two binomial factors.
 NAT: HSA.SSE.A.1.a| HSA.SSE.A.1.b STA: MFAS.912.HSA.SSE.1.1.a| MFAS.912.HSA.SSE.1.1.b
 TOP: 7-6 Example 2 Understand Factoring by Grouping
62. ANS: D PTS: 1 DIF: L2 REF: 9-3 Rewriting Radical Expressions
 OBJ: 9-3.1 Use properties of exponents to rewrite radical expressions.
 NAT: HSN.RN.A.2 STA: MFAS.912.HSN.RN.1.2
 TOP: 9-3 Example 1 Use Properties to Rewrite Radical Expressions
 KEY: Product Property of Square Roots | radicand | radical expression | perfect square factor
63. ANS: A PTS: 1 DIF: L2
 REF: 9-6 The Quadratic Formula and the Discriminant
 OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
 NAT: HSA.REI.B.4.b STA: MFAS.912.HSA.REI.2.4.b
 TOP: 9-6 Example 4 Understand and Use the Discriminant KEY: discriminant | Quadratic Formula
64. ANS: C PTS: 1 DIF: L2

- REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSA.REI.B.4.b STA: MFAS.912.HSA.REI.2.4.b
TOP: 9-6 Example 4 Understand and Use the Discriminant KEY: discriminant | Quadratic Formula
65. ANS: B PTS: 1 DIF: L2
REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSA.REI.B.4.b STA: MFAS.912.HSA.REI.2.4.b
TOP: 9-6 Example 4 Understand and Use the Discriminant KEY: discriminant | Quadratic Formula
66. ANS: A PTS: 1 DIF: L2
REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSA.REI.B.4.b STA: MFAS.912.HSA.REI.2.4.b
TOP: 9-6 Example 4 Understand and Use the Discriminant KEY: discriminant | Quadratic Formula
67. ANS: B PTS: 1 DIF: L3
REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSA.REI.B.4.b STA: MFAS.912.HSA.REI.2.4.b
TOP: 9-6 Example 4 Understand and Use the Discriminant KEY: discriminant | Quadratic Formula
68. ANS: C PTS: 1 DIF: L2
REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSN.Q.A.3| HSA.CED.A.1| HSA.REI.B.4.a| HSA.REI.B.4.b
STA: MFAS.912.HSN.Q.1.3| MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.4.a|
MFAS.912.HSA.REI.2.4.b TOP: 9-6 Example 4 Understand and Use the Discriminant
KEY: discriminant
69. ANS: B PTS: 1 DIF: L2
REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSN.Q.A.3| HSA.CED.A.1| HSA.REI.B.4.a| HSA.REI.B.4.b
STA: MFAS.912.HSN.Q.1.3| MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.4.a|
MFAS.912.HSA.REI.2.4.b TOP: 9-6 Example 4 Understand and Use the Discriminant
KEY: discriminant
70. ANS: A PTS: 1 DIF: L2
REF: 9-6 The Quadratic Formula and the Discriminant
OBJ: 9-6.3 Use the discriminant to determine the number and type of solutions to a quadratic equation.
NAT: HSN.Q.A.3| HSA.CED.A.1| HSA.REI.B.4.a| HSA.REI.B.4.b
STA: MFAS.912.HSN.Q.1.3| MFAS.912.HSA.CED.1.1| MFAS.912.HSA.REI.2.4.a|
MFAS.912.HSA.REI.2.4.b TOP: 9-6 Example 4 Understand and Use the Discriminant
KEY: discriminant