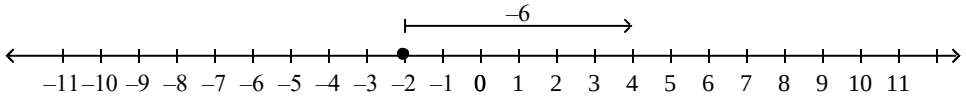
Alg. 2 Hon. Summer Assignment

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. $D = \{0,1,2,3,4,5,6,7\}$

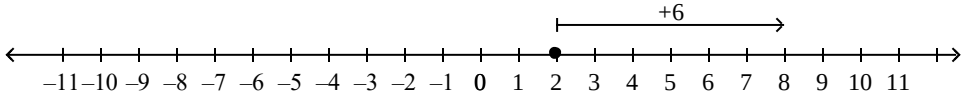
____ 2. To which subsets of the real numbers does the number 1.68 belong?
   a. rational numbers
   b. natural numbers, whole numbers, integers, rational numbers
   c. rational numbers, irrational numbers
   d. none of the above

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



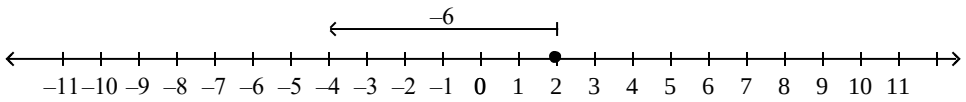
-2 + 6 = 4

   b.



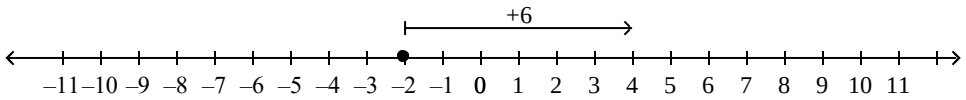
2 + 6 = 8

   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. $2(h - 8) - h = h - 16$

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

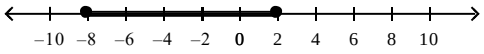
What is the solution of the inequality?

____ 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 $-8 < x \leq 2$?

a.



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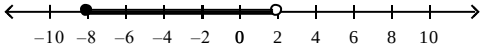
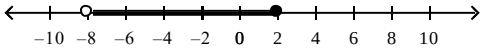
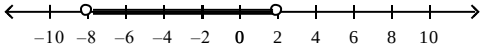


c.

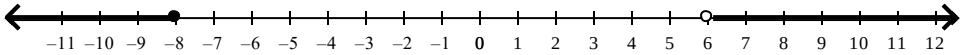


d.



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

a.



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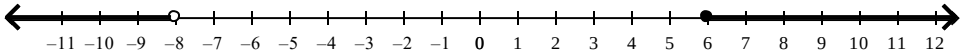
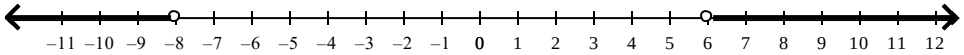
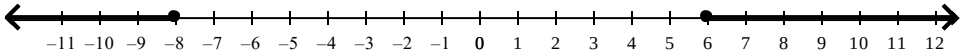


c.



d.



____ 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. $y - 1 = -\frac{3}{4}(x - 9)$

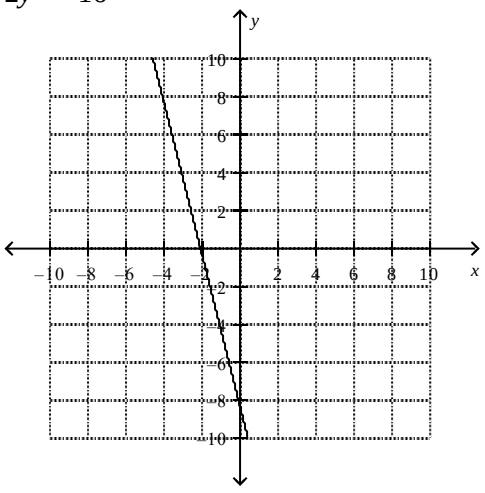
c. $y - 1 = 9(x + \frac{3}{4})$

d. $y - 9 = -\frac{3}{4}(x - 0)$

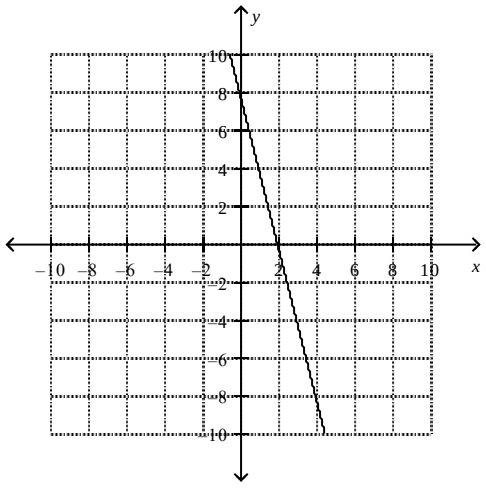
Match the equation with its graph.

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

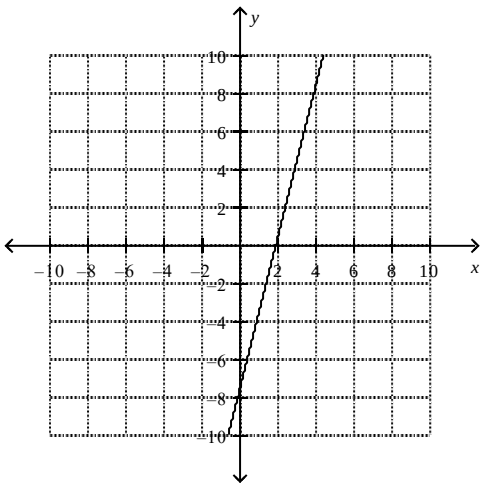
a.



c.



b.



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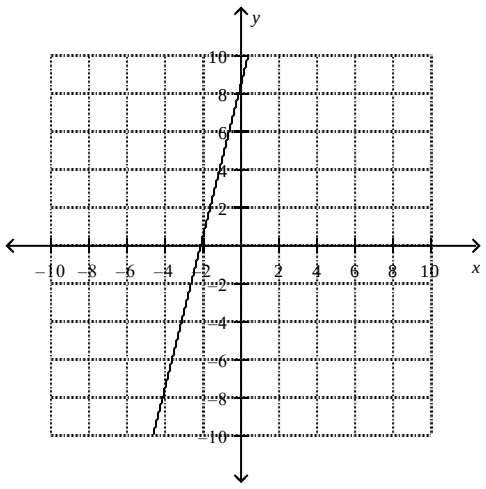
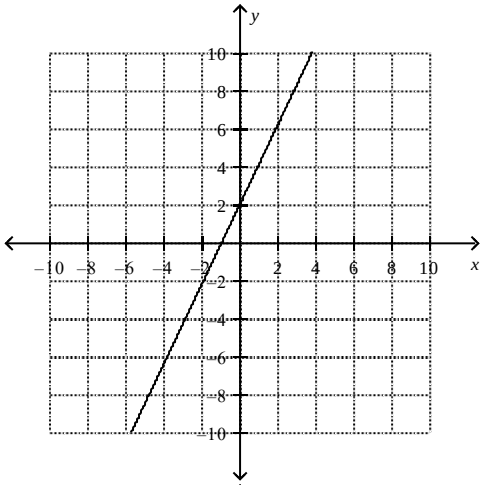
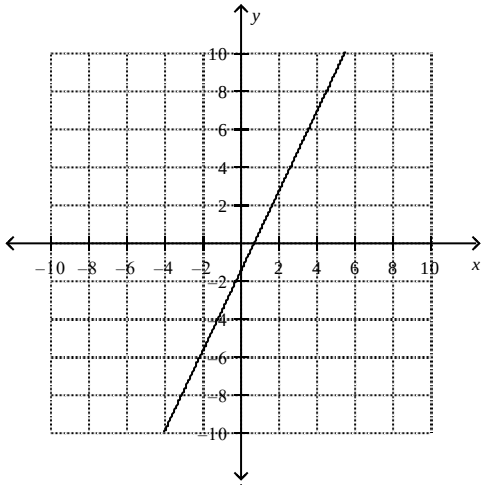


____ 21. $-\frac{7}{4}x - \frac{5}{6}y = \frac{35}{24}$

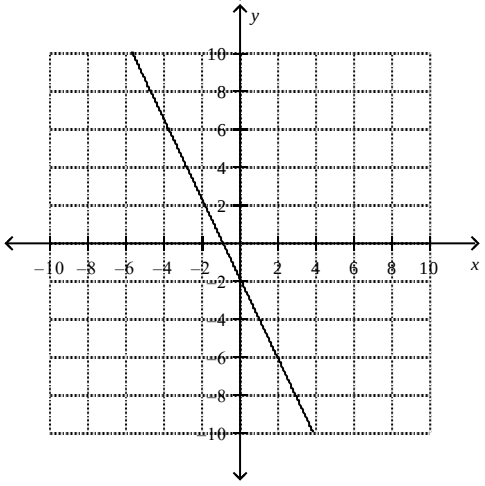
a.



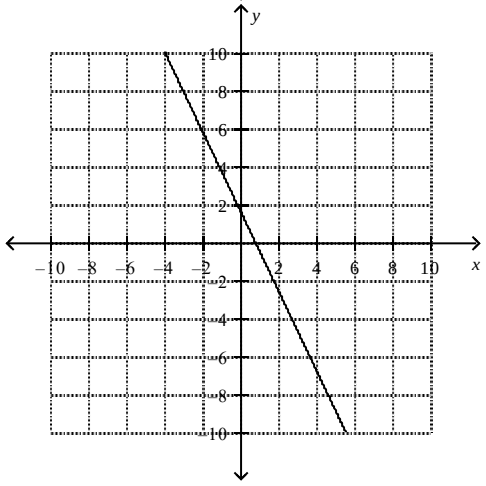
c.



b.



d.



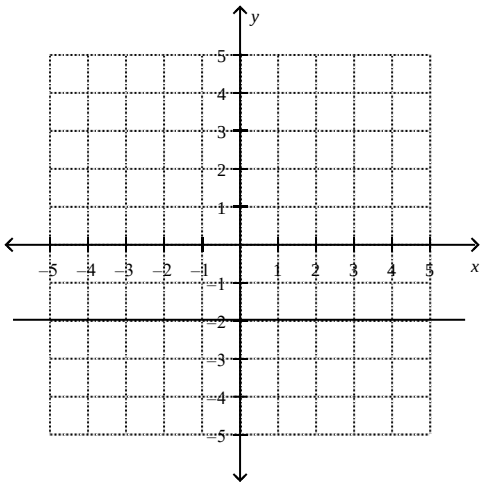
____ 22. Mr. Martinez is buying equipment for his school's computer lab. He has a budget of $7500. New desktop computers cost $600 each and new tablets cost $500 each. Which equation represents how much equipment Mr Martinez can buy with his budget?

a. $7500x + 600y = 500$

c. $600x + 500y = 7500$

b. $7500 + 600x = 500y$ d. $600x = 500y + 7500$

____ 23. Which equation matches the graph?



a. $-2y = 4$ c. $x + y = -2$
b. $-2x = 4$ d. $y = -2x$

____ 24. Which equation's graph is a vertical line?
a. $3x + 3y = 0$ c. $4x = 12$
b. $3x - 3y = 0$ d. $y = -2$

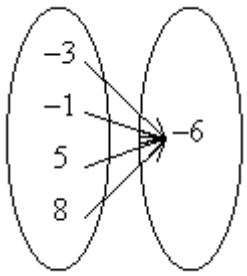
____ 25. Mrs. Dyson works at a music camp. She has $90 to spend on guitar strings for her students. A pack of bronze strings costs $6.00. A pack of nickel strings costs $4.50. The following equation represents her situation.

$$6x + 4.5y = 90$$

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*. c. Substitute *y* for *x* and solve for *y*.
b. Substitute 0 for *y* and solve for *x*. d. Substitute *x* for *y* and solve for *x*.

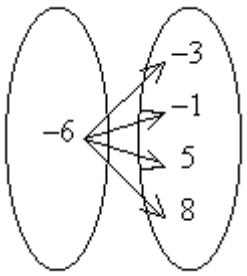
____ 26. Identify the mapping diagram that represents the relation and determine whether the relation is a function.
$\{(-3, -6), (-1, -6), (5, -6), (8, -6)\}$

a.



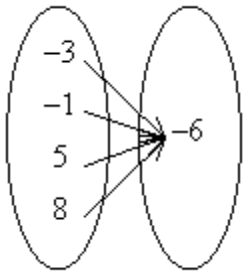
The relation is not a function.

c.



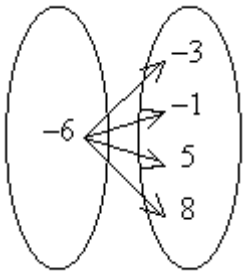
The relation is a function.

b.



The relation is a function.

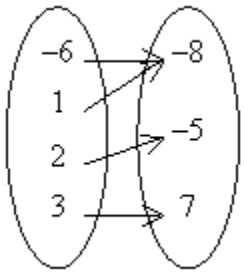
d.



The relation is not a function.

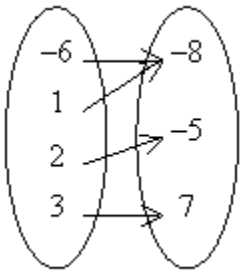
____ 27. Identify the mapping diagram that represents the relation and determine whether the relation is a function.
$\{(-8,-6),(-5,2),(-8,1),(7,3)\}$

a.



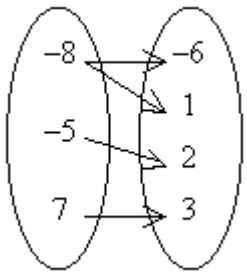
The relation is a function.

c.



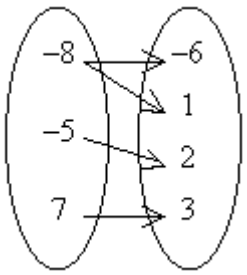
The relation is not a function

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
b. 7 jumping jacks
c. 144 jumping jacks
d. 234 jumping jacks

____ 29. How are the functions $y = x$ and $y = x + 5$ related? How are their graphs related?

a. 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.
b. 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.
c. 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.
d. 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 $g(x) = f(x + 7)$?
a. $g(x)$ is the graph of $f(x)$ translated 7 units down.
b. $g(x)$ and $f(x)$ have the same y-intercept.
c. $g(x)$ is the graph of $f(x)$ translated 7 units to the left.
d. $g(x)$ is the graph of $f(x)$ translated 7 units to the right.

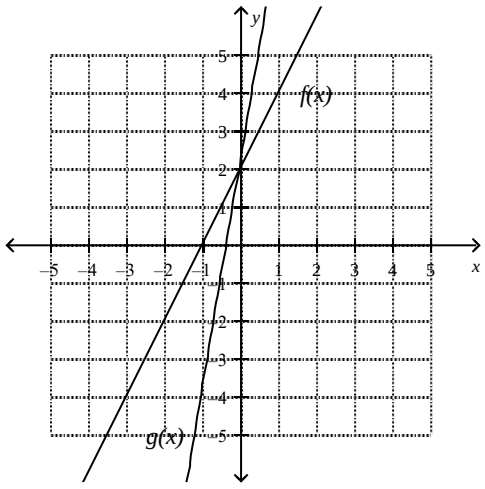
____ 31. Which function's graph is a translation of the graph of $f(x) = x$ shifted 7 units to the left?
a. $g(x) = -7x$
b. $g(x) = x + 7$
c. $g(x) = 7x$
d. $g(x) = x - 7$

____ 32. Which function's graph is a translation of the graph of $f(x) = x$ shifted 5 units to the right?
a. $g(x) = 5x$
b. $g(x) = x - 5$
c. $g(x) = x + 5$
d. $g(x) = -5x$

____ 33. If a function, $f(x)$ is shifted to the left four unit(s), what function represents the transformation?
a. $f(x - 4)$
b. $f(x) - 4$
c. $f(x + 4)$
d. $f(x) + 4$

____ 34. Which of the following statements is true about the graphs of $f(x) = x$ and $g(x) = f(5x)$?
a. The graph of $g(x)$ is steeper than the graph of $f(x)$.
b. The graph of $g(x)$ is less steep than the graph of $f(x)$.
c. The graphs of $g(x)$ and $f(x)$ have different y-intercepts.
d. 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 $g(x)$?



a. $f(x) = 2x + 2;\ g(x) = 3f(x)$
b. $f(x) = 2x + 2;\ g(x) = f(3x)$
c. $f(x) = 2x + 2;\ g(x) = -3f(x)$
d. $f(x) = 2x + 2;\ g(x) = f(-3x)$

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

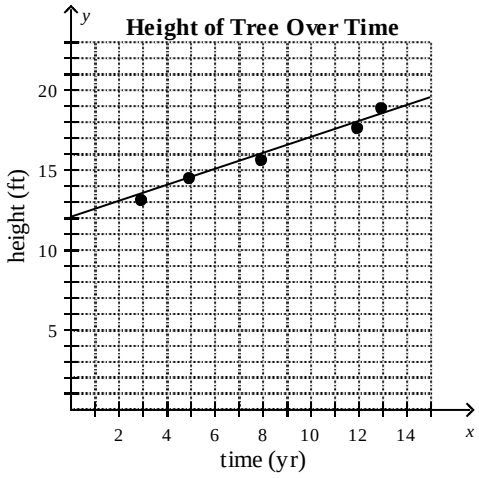
____ 36. 2, 7, 13, 20, . . .

a. yes; 5 b. yes; 6 c. yes; 2 d. no

____ 37. Suppose your business has a special checking account used just for paying the phone bill. The balance is $740.00 this month. Next month the balance will be $707.60, after that it will be $675.20, and on the third month the balance will be $642.80. Write an explicit formula to represent the balance in the account as an arithmetic sequence. How many months can you pay your phone bill without depositing any more money in the account?

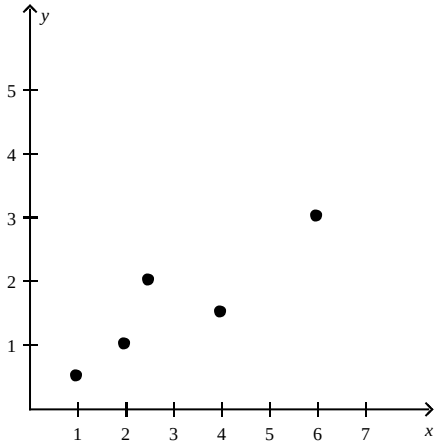
a. $A(n) = 740.00 - 32.40n$; 22 months
b. $A(n) = 740.00 + (n - 1)(-32.40)$; 23 months
c. $A(n) = 740.00 - 32.40n$; 23 months
d. $A(n) = 740.00 + (n - 1)(-32.40)$; 24 months

____ 38. The scatter plot below shows the height of a tree over time. What is the approximate height of the tree after 10 years?



a. 13 ft
b. 20 ft
c. 17 ft
d. 21 ft

____ 39. Which line of best fit equation best represents the data shown in the plot?

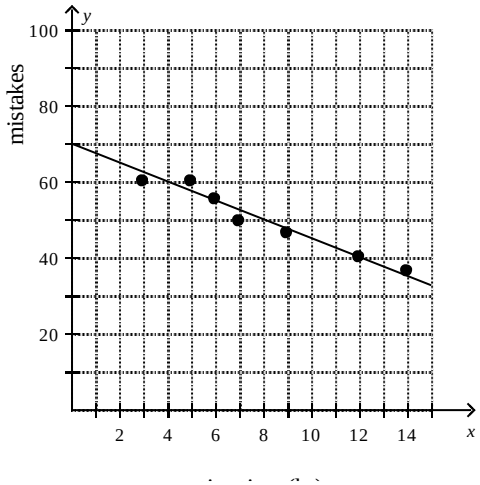


a. $y = \frac{1}{2}x$
c. $y = 2x$

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?

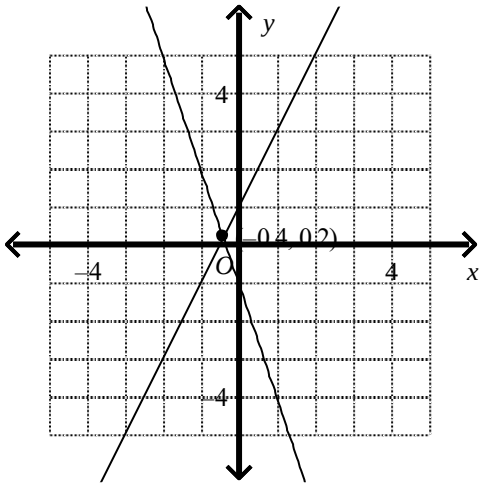


a. 55 mistakes
b. 37 mistakes
c. 63 mistakes
d. 45 mistakes

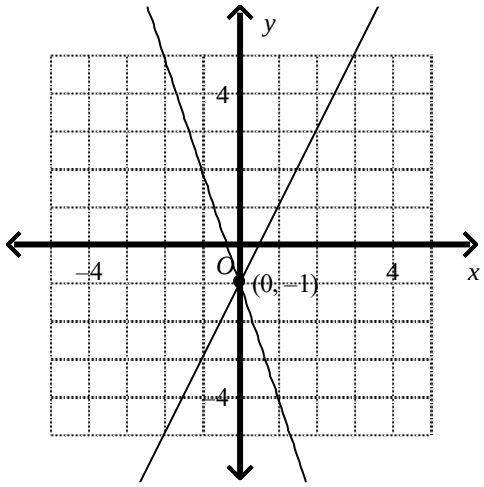
What is the solution of the system? Use a graph.

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

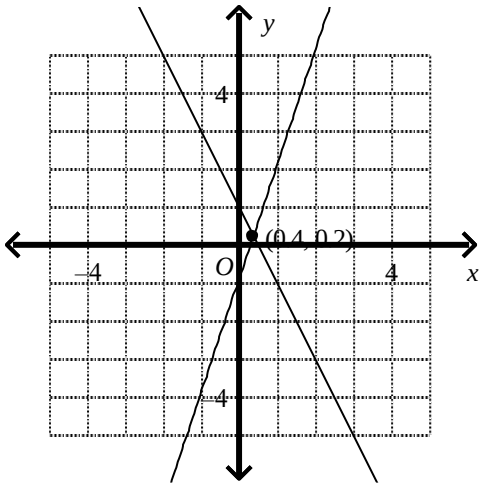
a.



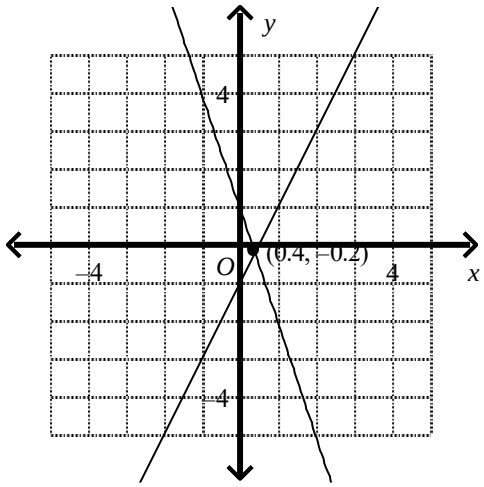
c.



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. $\left(-10, -\frac{1}{2}\right)$

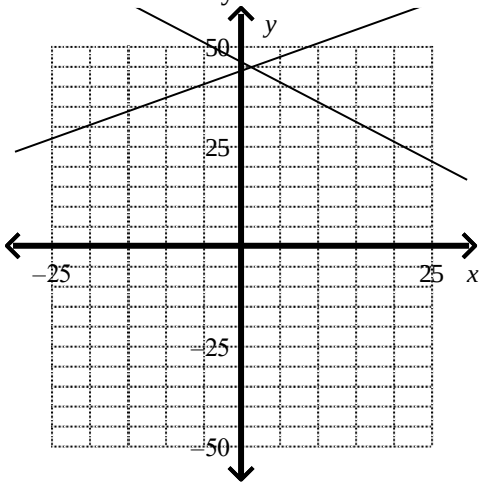
____ 47. Sander sold 46 car wash tickets for a total of $350. Some were basic car wash tickets that cost $5.50, and some were deluxe tickets that cost $8.00.

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.



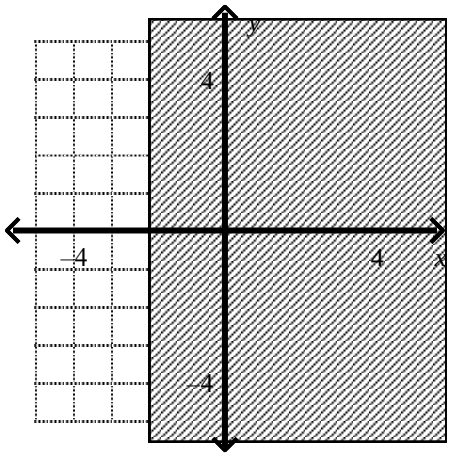
b. $(7, 39)$

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

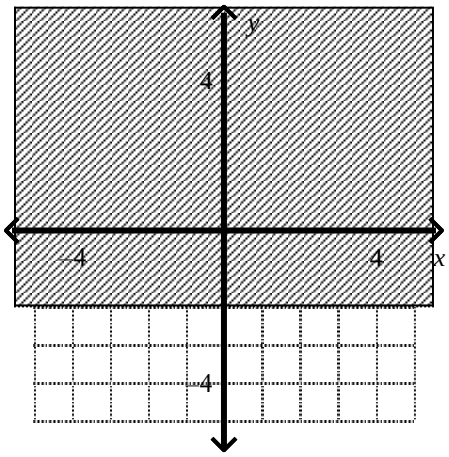
What is the graph of the inequality in the coordinate plane?

____ 48. $y < -2$

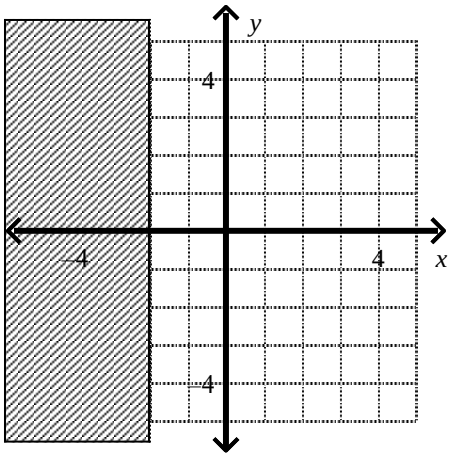
a.



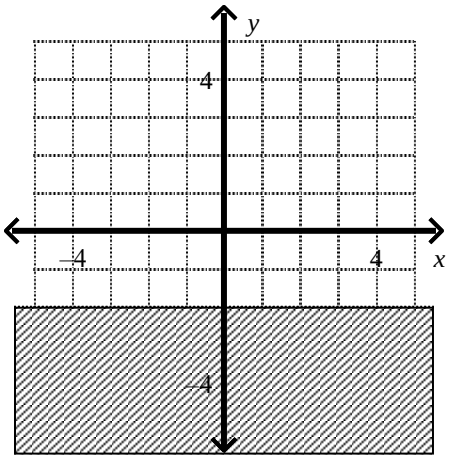
c.



b.

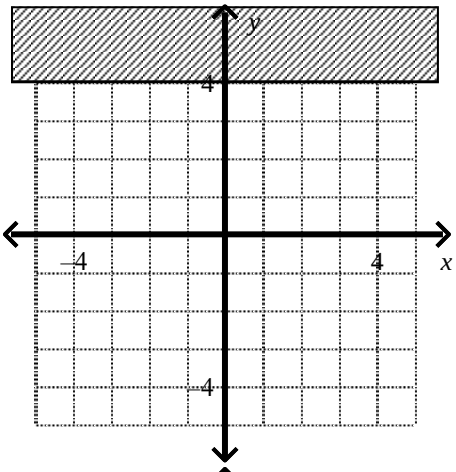


d.

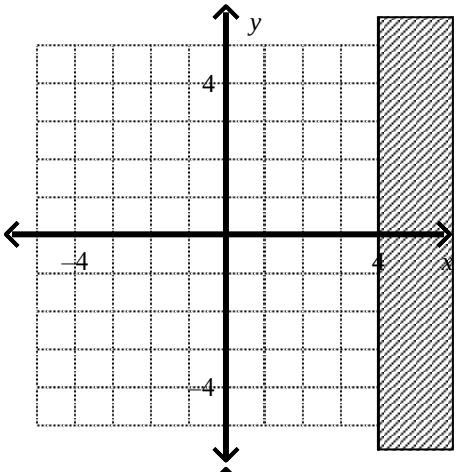


____ 49. $x \geq 4$

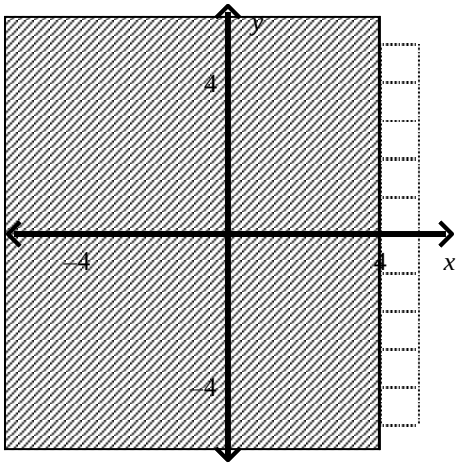
a.



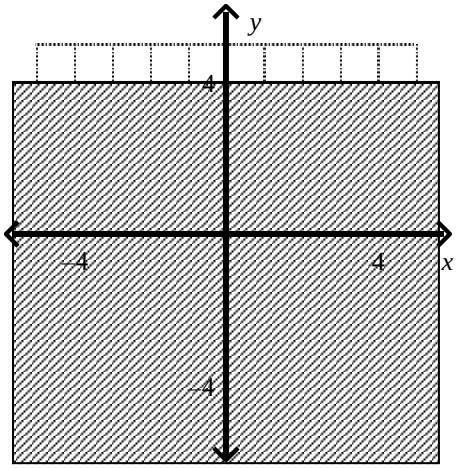
c.



b.



d.



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

a. $y < 2x$

b. $y > x$

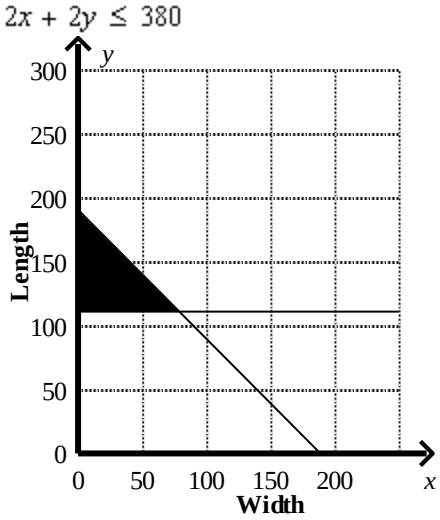
c. $y \leq 2x + 4$

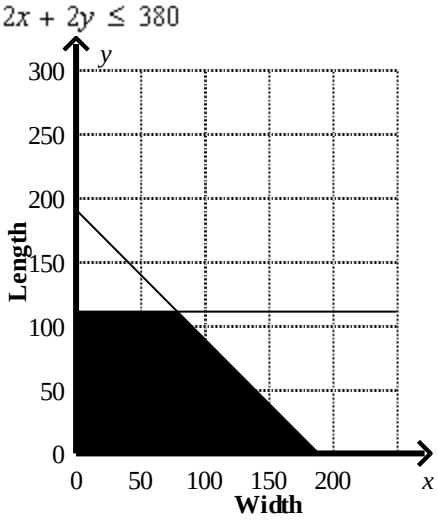
d. $y > 2x - 5$

____ 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.

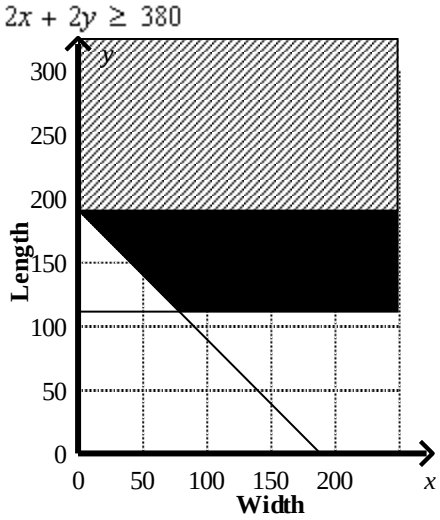
a. $y \geq 110$

c. $y \leq 110$

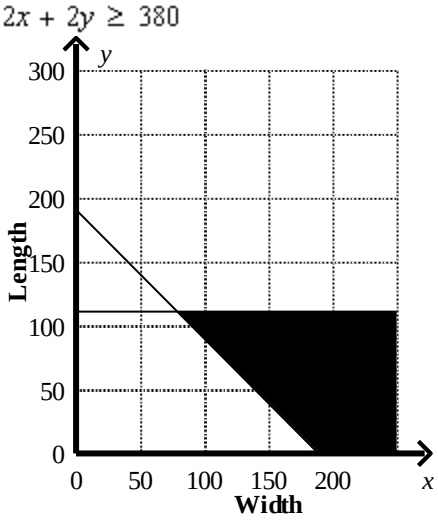




b. $y \geq 110$



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

Simplify the product using a table.

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

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

a. $-25h^2 + 45h - 20$
b. $-25h^2 - 45h - 20$
c. $-25h^2 - 5h + 20$
d. $-25h^2 + 5h + 20$

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

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

a. $8h^2 - 26h + 15$
b. $8h^2 + 26h + 15$
c. $8h^2 - 14h - 15$
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. $4x^2$
b. $24x^2$
c. $74x^2$
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. $(100 - 4\pi)x^2$
b. $100x^2 + 4\pi x^2$
c. $100x^2 - 4\pi x^2$
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 $x + 10$
b. $x + 6$ and $x - 10$
c. $x - 6$ 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 $x + 7$
b. $x + 6$ and $x - 7$
c. $x - 6$ 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 $4y - 5$
b. $y - 2$ and $4y + 5$
c. $-y + 2$ 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. $(25x - 1)^2$
b. $(25x - 22)(x + 1)$
c. $(25x + 22)^2$
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 $-2x + 3$
b. $2x - 7$ and $2x + 3$
c. $2x - 2$ 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

1. 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
2. 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
3. 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
4. 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
5. 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
6. 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
7. 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
8. 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