

**Summer Review 7th Honors****Evaluate.**

1.  $\frac{24}{y} - x$  when  $y = 3$  and  $x = 5$
2.  $(x - y)^3$  when  $y = 3$  and  $x = 5$
3.  $2x^3 + 4y$  when  $y = 3$  and  $x = 5$
4.  $|-2.7|$
5.  $-(-4.5)$
6.  $-4.5 + (-9.1)$
7.  $9 + (-10) + 2$
8.  $|-6.4| - 3.1$
9.  $5 - (-8) + x$  when  $x = -5$
10.  $1 - 2x^2$  when  $x = -2$
11.  $\frac{4-x}{-3}$  when  $x = -1$
12.  $-\sqrt{100}$
13.  $\frac{24}{y} - x$  when  $y = 3$  and  $x = 5$
14.  $(x - y)^3$  when  $y = 3$  and  $x = 5$
15.  $2x^3 + 4y$  when  $y = 3$  and  $x = 5$
16.  $|-2.7|$
17.  $-(-4.5)$
18.  $5y + x^2$  when  $y = 3$  and  $x = 5$

19.  $x^4 + 4(y - 2)$  when  $y = 3$  and  $x = 5$

20.  $-2\frac{5}{6} + 3\frac{1}{4}$

21.  $|-9| - 2x + 5$  when  $x = 6$

22.  $-\sqrt{81}$

23. Insert grouping symbols in  $5 \cdot 4 + 6 \div 2$  so that the value of the expression is 25.24. If you can travel only 35 miles per hour, is  $2\frac{1}{2}$  hours enough time to get to a concert that is 85 miles away?  
Give the expression you used to find the answer.**Write an algebraic expression.**

25. seven times a number

26. seven times a number

27. the quotient of  $m$  and 2**Decide whether the statement is *true* or *false*.**

28.  $(2 \cdot 3)^2 = 2 \cdot 3^2$

29. The quotient of 3 and 12 is 4.

30.  $9x > x^3$  when  $x = 3$

31.  $(2 \cdot 3)^2 = 2 \cdot 3^2$

32. The quotient of 3 and 12 is 4.

33.  $9x > x^3$  when  $x = 3$

34.  $8 \leq y^2 + 3$  when  $y = 3$

35. Members of the marching band are making their own color-guard flags. Each rectangular flag is 1.2 yards by 0.5 yard. The material costs \$1.75 per square yard.  
Write a function showing the relationship between the number of flags and the cost of the material.

36. Members of the marching band are making their own color-guard flags. Each rectangular flag is 1.2 yards by 0.5 yard. The material costs \$1.75 per square yard. How much will it cost to make 20 flags?
37. You stuffed 108 envelopes in 45 minutes. At this rate, how many envelopes can you stuff in 2 hours?
38. Graph the function  $y = 2x + 1$  with the domain  $x = 0, 1, 2, 3, 4,$  and  $5$ .

**Find the product or quotient.**

39.  $(-6)(4)$
40.  $(-8.4)(-100)$
41.  $72 \div (-12)$
42.  $\left(-\frac{3}{8}\right) \div \left(\frac{1}{2}\right)$
43.  $-56 \div \left(-\frac{7}{8}\right)$

**Simplify.**

44.  $-9(y + 11)$
45.  $14p + 2(5 - p)$
46.  $5(3 - z) - z$

**Write the numbers in increasing order.**

47.  $2.4, -\sqrt{11}, -\frac{16}{3}, \sqrt{16}, 4.8$
48.  $\sqrt{8}, -\sqrt{9}, \frac{15}{4}, -4.2, -\frac{7}{8}$
49.  $-6.2, -\sqrt{5}, -\frac{23}{7}, -\sqrt{25}$
50. A company had a first-quarter profit of \$2189.70, a second-quarter profit of \$1527.11, a third-quarter loss of \$2502.18, and a fourth-quarter loss of \$266.54. What was the company's profit or loss for the year?

51. Insert grouping symbols in  $5 \cdot 4 + 6 \div 2$  so that the value of the expression is 25.
52. If you can travel only 35 miles per hour, is  $2\frac{1}{2}$  hours enough time to get to a concert that is 85 miles away?  
Give the expression you used to find the answer.
53. Members of the marching band are making their own color-guard flags. Each rectangular flag is 1.2 yards by 0.5 yard. The material costs \$1.75 per square yard.  
Write a function showing the relationship between the number of flags and the cost of the material.
54. Members of the marching band are making their own color-guard flags. Each rectangular flag is 1.2 yards by 0.5 yard. The material costs \$1.75 per square yard.  
How much will it cost to make 20 flags?
55. You stuffed 108 envelopes in 45 minutes. At this rate, how many envelopes can you stuff in 2 hours?
56. Graph the function  $y = 2x + 1$  with the domain  $x = 0, 1, 2, 3, 4,$  and 5.

**Solve the equation if possible.**

57.  $15 = m + 20$
58.  $-\frac{1}{2}x = 4$
59.  $\frac{y}{-1.3} = -6$
60.  $\frac{m}{3} + 8 = 12$
61.  $1.8z - 3.4 = 2$
62.  $\frac{2}{3}(x - 2) = -12$
63.  $2(k - 6) = -(12 - 2k)$
64.  $-4y - (5y + 6) = -7y + 3$
65.  $2 + x = 8$
66.  $19 = a - 4$
67.  $-3y = -18$

68.  $\frac{x}{4} = 5$

69.  $17 = 5 - 3p$

70.  $-\frac{3}{4}x - 2 = -8$

71.  $\frac{5}{3}(9 - w) = -10$

72.  $-3(x - 2) = x$

73.  $-5r - 6 + 4r = -r + 2$

**Solve.**

74.  $\frac{v}{60} = \frac{17}{20}$

75.  $\frac{x-1}{x+3} = \frac{7}{8}$

76.  $\frac{5}{x} = \frac{2}{8}$

77.  $\frac{x+2}{3} = \frac{x+4}{5}$

78. What number is 72% of 130?

79. What percent of 280 is 182?

**Solve for the indicated variable.**

80.  $S = B + \frac{1}{2}Pl, l$

81.  $C = 2\pi r, r$

82. Rewrite  $4y + 7 = 9 + 3x$  so that  $y$  is a function of  $x$ .

83. Your cousin earns about \$25 per week baby-sitting and receives one \$5 bonus. You earn about \$15 per week mowing lawns and \$12 per week running errands. After working the same number of weeks, you have \$11 more than your cousin.

- Write and solve an equation to find how many weeks you worked.
- Check your solution with a table or a graph.

\_\_\_\_\_ 84. You shovel snow. You charge \$7 per driveway and earn \$42. Let  $x$  represent the number of driveways you shoveled. Which of the following equations is an algebraic model for the situation?

- $42x = 7$
- $\frac{1}{7}x = 42$
- $7x = 42$
- $\frac{1}{42}x = 7$

85. The senior class is planning a trip that will cost \$35 per student. If \$3920 has been collected from the seniors for the trip, how many have paid for the trip?

86. Graph the function  $y = 1.5x + 0.5$  with the domain  $x = 0, 1, 2, 3, 4,$  and  $5$ .

**Find the product or the quotient.**

87.  $(-9)(8)\left(-\frac{5}{6}\right)$

88. An eagle dives from its nest with a velocity of  $-8\frac{1}{3}$  feet per second. Find the vertical displacement in  $4\frac{1}{2}$  seconds.

89. What number is 18% of 65?

90. 32 is what percent of 20?

91. 45 is 36% of what number?

92. Rewrite  $3x + 4y = 15 + 6y$  so that  $y$  is a function of  $x$ .

**Plot and label the points in a coordinate plane.**

93.  $A(-5, 1)$ ,  $B(0, 3)$ ,  $C(-1, -5)$ ,  $D(4, 6)$

**Use a table of values to graph the equation.**

94.  $y = -x + 3$

**Graph the line that has the given intercepts.**

95.  $x$ -intercept 3  
 $y$ -intercept:  $-1$

**Graph.**

96.  $3x - 2y - 2 = 0$   
97.  $y - 4 = -3(x + 2)$

**Plot the points and find the slope of the line passing through the points.**

98.  $(0, 1), (-2, -6)$   
99. Decide whether the graphs of the two equations are parallel lines. *Explain* your answer.  
 $y = 4x + 3, y = -4x - 5$

**The variables  $x$  and  $y$  vary directly. Use the given values of the variables to write an equation that relates  $x$  and  $y$ .**

100.  $x = 1.3, y = 3.9$   
101. Evaluate the function  $f(x) = -(x - 2)$  when  $x = 3, x = 0,$  and  $x = -4$ .  
102. Abigail has a subway pass with a \$10 value. Each time she rides the subway \$.75 is deducted from the card's value. The amount of money  $y$  left on her pass after  $r$  rides is given by  $y = 10 - \frac{3}{4}r$ . Graph the equation for six rides from  $r = 0$  to  $r = 6$ .

**Write an equation of the line with the given slope and  $y$ -intercept. Write the equation in slope-intercept form.**

103.  $m = 2, b = -1$

**Graph the line that passes through the points. Then write an equation of the line in slope-intercept form.**

104.  $(6, 2), (8, -4)$

**Write an equation of the line that passes through the given point and has the given slope. Write the equation in slope-intercept form.**

105.  $(4, -2), m = \frac{1}{2}$

**Rewrite the equation in standard form with integer coefficients.**

106.  $-2y + \frac{1}{2}x = 4$

107. Write an equation of a line that is perpendicular to  $y = -2x + 6$  and passes through  $(-4, 7)$ .108. Maria needs \$2.20 to buy a magazine. The only money she has is a jar of nickels and dimes. Write an equation in standard form for the different amounts of nickels  $x$  and dimes  $y$  she could use.

**The table shows the number of employees in the cellular telephone industry in the United States from 1990 through 1995.**

Source: Cellular Telecommunications Industry Association

Cellular Telephone Industry	
Years Since 1990	Employees
0	21,400
1	26,300
2	34,300
3	39,800
4	?
5	68,200

109. Make a scatter plot and fit a line to the data.

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

111. Use the linear model to estimate the number of employees in 1994. Did you use *linear interpolation* or *linear extrapolation*?

**Solve the inequality. Graph the solution on a number line.**

112.  $x - 3 < 10$

113.  $-6 > x + 5$

114.  $-32x > 64$

115.  $\frac{x}{4} \leq 8$

116.  $\frac{2}{3}x + 2 \leq 4$

117.  $-2x + 8 > 3x + 10$



**Solve the inequality. Write a sentence that describes the solution.**

118.  $-3 \leq 4x + 5 \leq 7$

119.  $8x - 11 < 5$  or  $4x - 7 > 13$

**Solve the equation.**

120.  $|3x - 9| + 6 = 18$

**Solve the inequality.**

121.  $|x - 8| - 3 \leq 10$

122.  $|2x - 6| > 14$

**Graph the inequality in a coordinate plane.**

123.  $x - 1 \leq -3$

124.  $x + 2y > 6$

**Graph to solve the linear system.**

125.  $6x + 2y = 16$   
 $-2x + y = -2$

**Use the substitution method to solve the linear system.**

126.  $-3x + 6y = 24$   
 $-2x - y = 1$

**Solve the linear system using elimination.**

127.  $x + 6y = 9$   
 $-x + 4y = 11$

128.  $3x + 4y = 9$   
 $4y - 3x = -1$

Solve the system using the method of your choice and tell how many solutions the system has.

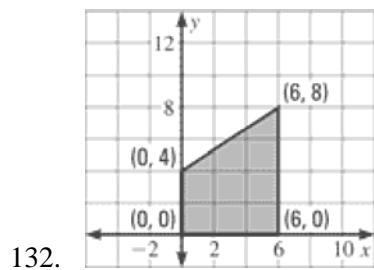
129.  $y = -4x - 3$   
 $8x + 2y = 6$

130. A piece of wire 42 feet long is to be divided into two sections so that one section is  $\frac{2}{5}$  of the other section.  
What are the lengths of the two sections?

Graph the system of linear inequalities.

$x < 5$   
131.  $y \leq 6$   
 $y > -2x + 3$

Write a system of linear inequalities that defines the shaded region.



## Summer Review 7th Honors Answer Section

1. ANS:  
3

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.01  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | variable | substitution  
BLM: Comprehension                    NOT: 978-0-618-65612-7

2. ANS:  
8

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.02  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | variable | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

3. ANS:  
162

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.03  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | variable | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

4. ANS:  
2.7

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.14  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | absolute value | expression | evaluate  
BLM: Comprehension                    NOT: 978-0-618-65612-7

5. ANS:  
4.5

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.15  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | negative  
BLM: Comprehension                    NOT: 978-0-618-65612-7

6. ANS:  
-13.6

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.16  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | negative | add  
BLM: Comprehension                    NOT: 978-0-618-65612-7

7. ANS:  
1

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.17  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | integer  
BLM: Comprehension                    NOT: 978-0-618-65612-7

8. ANS:  
3.3

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.18  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | decimal | absolute value  
BLM: Comprehension                    NOT: 978-0-618-65612-7

9. ANS:  
8

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.19  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | negative | substitution  
BLM: Comprehension                    NOT: 978-0-618-65612-7

10. ANS:  
-7

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.22  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | negative | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

11. ANS:  
 $\frac{5}{-3}$

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.27  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | substitute | variable  
BLM: Comprehension                    NOT: 978-0-618-65612-7

12. ANS:  
-10

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.28  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | square root  
BLM: Comprehension                    NOT: 978-0-618-65612-7

13. ANS:  
3

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.01  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | expression | evaluate | variable | substitution  
BLM: Comprehension                    NOT: 978-0-618-65612-7

14. ANS:  
8

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.02  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | expression | evaluate | variable | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

15. ANS:  
162

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.03  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | expression | evaluate | variable | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

16. ANS:  
2.7

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.14  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3) KEY: Midterm/Final | absolute value | expression | evaluate  
BLM: Comprehension                    NOT: 978-0-618-65612-7

17. ANS:  
4.5

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.15  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3) KEY: Midterm/Final | expression | evaluate | negative  
BLM: Comprehension                    NOT: 978-0-618-65612-7

18. ANS:  
40

PTS: 1                    DIF: Level B            REF: A1.CR.1\_3.Eng.01  
TOP: Chapters 1-3 KEY: Cumulative Review | expression | evaluate  
BLM: Comprehension                    NOT: 978-0-618-65612-7

19. ANS:  
629

PTS: 1                    DIF: Level B            REF: A1.CR.1\_3.Eng.02  
TOP: Chapters 1-3 KEY: Cumulative Review | expression | evaluate  
BLM: Comprehension                    NOT: 978-0-618-65612-7

20. ANS:  
 $\frac{5}{12}$

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.07  
TOP: Chapters 1-3 KEY: Cumulative Review | addition | fraction  
BLM: Comprehension                    NOT: 978-0-618-65612-7

21. ANS:  
2

PTS: 1                    DIF: Level B            REF: A1.CR.1\_3.Eng.11  
TOP: Chapters 1-3 KEY: Cumulative Review | simplify | expression | absolute value  
BLM: Comprehension                    NOT: 978-0-618-65612-7

22. ANS:  
-9

PTS: 1                      DIF: Level A                      REF: A1.CR.1\_3.Eng.13  
TOP: Chapters 1-3    KEY: Cumulative Review | simplify | expression | square root | negative  
BLM: Comprehension                      NOT: 978-0-618-65612-7

23. ANS:  
 $5 \cdot (4+6) \div 2$

PTS: 1                      DIF: Level B                      REF: A1.MF.1\_2.Eng.04  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | order of operations  
BLM: Comprehension                      NOT: 978-0-618-65612-7

24. ANS:  
Yes,  $2\frac{1}{2}$  hours is enough time.  $35(2\frac{1}{2}) \leq 85$

PTS: 1                      DIF: Level B                      REF: A1.MF.1\_2.Eng.05  
STA: CO.COMCS.MTH.95.9-12.2.1 | CO.COAF.MTH.05.9.2.1.a  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | inequality | rate  
BLM: Comprehension                      NOT: 978-0-618-65612-7

25. ANS:  
 $7n$

PTS: 1                      DIF: Level A                      REF: A1.MF.1\_2.Eng.06  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | variable  
BLM: Comprehension                      NOT: 978-0-618-65612-7

26. ANS:  
 $7n$

PTS: 1                      DIF: Level A                      REF: A1.MF.1\_2.Eng.06  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | expression | variable  
BLM: Comprehension                      NOT: 978-0-618-65612-7

27. ANS:  
 $\frac{m}{2}$  or  $m \div 2$

PTS: 1                      DIF: Level A                      REF: A1.CR.1\_3.Eng.03  
TOP: Chapters 1-3    KEY: Cumulative Review | expression                      BLM: Comprehension  
NOT: 978-0-618-65612-7

28. ANS:  
false

PTS: 1                      DIF: Level A                      REF: A1.MF.1\_2.Eng.07  
STA: CO.COAF.MTH.05.9.1.2.a                      TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | exponent                      BLM: Comprehension  
NOT: 978-0-618-65612-7

29. ANS:  
false
- PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.08  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | quotient  
BLM: Comprehension                    NOT: 978-0-618-65612-7
30. ANS:  
false
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.09  
STA: CO.COMCS.MTH.95.9-12.2.1    TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
KEY: Midterm/Final | expression | evaluate | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7
31. ANS:  
false
- PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.07  
STA: CO.COAF.MTH.05.9.1.2.a    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | expression | evaluate | exponent                    BLM: Comprehension  
NOT: 978-0-618-65612-7
32. ANS:  
false
- PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.08  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | expression | evaluate | quotient  
BLM: Comprehension                    NOT: 978-0-618-65612-7
33. ANS:  
false
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.09  
STA: CO.COMCS.MTH.95.9-12.2.1    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | expression | evaluate | substitution | exponent  
BLM: Comprehension                    NOT: 978-0-618-65612-7
34. ANS:  
true
- PTS: 1                    DIF: Level B                    REF: A1.CR.1\_3.Eng.04  
STA: CO.COMCS.MTH.95.9-12.2.1    TOP: Chapters 1-3    KEY: Cumulative Review | inequality  
BLM: Comprehension                    NOT: 978-0-618-65612-7
35. ANS:  
 $y = 1.75[(1.2)(0.5)x]$  or  $y = 1.05x$
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.10  
STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.3 | CO.COMCS.MTH.95.9-12.2.4 |  
CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | function | cost  
BLM: Comprehension                    NOT: 978-0-618-65612-7

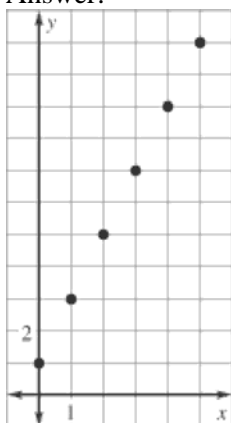
36. ANS:  
It will cost \$21.

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.11  
STA: CO.COMCS.MTH.95.9-12.2.3 | CO.COAF.MTH.05.9.2.3.a  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | function | cost  
BLM: Comprehension                    NOT: 978-0-618-65612-7

37. ANS:  
288 envelopes

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.12  
STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.3 | CO.COMCS.MTH.95.9-12.2.4 |  
CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | rate | function  
BLM: Comprehension                    NOT: 978-0-618-65612-7

38. ANS:  
Answer:



PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.13  
STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.4 | CO.COMCS.MTH.95.9-12.2.5 |  
CO.COAF.MTH.05.9.2.1.a | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | graph | function | domain | linear  
BLM: Comprehension                    NOT: 978-0-618-65612-7

39. ANS:  
-24

PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.20  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | product  
BLM: Comprehension                    NOT: 978-0-618-65612-7

40. ANS:  
840

PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.21  
TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | decimal | product  
BLM: Comprehension                    NOT: 978-0-618-65612-7



41. ANS:

-6

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.24  
 TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | evaluate | integer  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

42. ANS:

 $-\frac{3}{4}$ 

PTS: 1                    DIF: Level A            REF: A1.MF.1\_2.Eng.26  
 TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | product | fraction | multiply  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

43. ANS:

64

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.09  
 TOP: Chapters 1-3    KEY: Cumulative Review | division | multiplication | fraction  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

44. ANS:

 $-9y - 99$ 

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.23  
 TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | expression | simplify | distribute  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

45. ANS:

 $12p + 10$ 

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.25  
 TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
 KEY: Midterm/Final | expression | simplify | like-term | distribute  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

46. ANS:

 $15 - 6z$ 

PTS: 1                    DIF: Level B            REF: A1.CR.1\_3.Eng.10  
 TOP: Chapters 1-3    KEY: Cumulative Review | simplify | expression | like-term  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

47. ANS:

 $-\frac{16}{3}, -\sqrt{11}, 2.4, \sqrt{16}, 4.8$ 

PTS: 1                    DIF: Level B            REF: A1.MF.1\_2.Eng.29  
 TOP: 6-Week/Quarterly Exam (Ch. 1-2)    KEY: Midterm/Final | order | square root | decimal  
 BLM: Comprehension                            NOT: 978-0-618-65612-7

48. ANS:

$$-4.2, -\sqrt{9}, -\frac{7}{8}, \sqrt{8}, \frac{15}{4}$$

PTS: 1 DIF: Level B REF: A1.MF.1\_3.Eng.16  
 TOP: 9-Week/Mid-Term Exam (Ch. 1-3) KEY: Midterm/Final | order | square root | decimal  
 BLM: Comprehension NOT: 978-0-618-65612-7

49. ANS:

$$-6.2, -\sqrt{25}, -\frac{23}{7}, -\sqrt{5}$$

PTS: 1 DIF: Level B REF: A1.CR.1\_3.Eng.14  
 TOP: Chapters 1-3 KEY: Cumulative Review | simplify | square root | negative | order  
 BLM: Comprehension NOT: 978-0-618-65612-7

50. ANS:

\$948.09 profit

PTS: 1 DIF: Level B REF: A1.MF.1\_2.Eng.30  
 TOP: 6-Week/Quarterly Exam (Ch. 1-2)  
 KEY: Midterm/Final | profit | money | decimal | addition | subtraction  
 BLM: Comprehension NOT: 978-0-618-65612-7

51. ANS:

$$5 \cdot (4 + 6) \div 2$$

PTS: 1 DIF: Level B REF: A1.MF.1\_2.Eng.04  
 TOP: 9-Week/Mid-Term Exam (Ch. 1-3) KEY: Midterm/Final | expression | order of operations  
 BLM: Comprehension NOT: 978-0-618-65612-7

52. ANS:

Yes,  $2\frac{1}{2}$  hours is enough time.  $35(2\frac{1}{2}) \leq 85$

PTS: 1 DIF: Level B REF: A1.MF.1\_2.Eng.05  
 STA: CO.COMCS.MTH.95.9-12.2.1 | CO.COAF.MTH.05.9.2.1.a  
 TOP: 9-Week/Mid-Term Exam (Ch. 1-3) KEY: Midterm/Final | inequality | rate  
 BLM: Comprehension NOT: 978-0-618-65612-7

53. ANS:

$$y = 1.75[(1.2)(0.5)x] \text{ or } y = 1.05x$$

PTS: 1 DIF: Level B REF: A1.MF.1\_2.Eng.10  
 STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.3 | CO.COMCS.MTH.95.9-12.2.4 |  
 CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b  
 TOP: 9-Week/Mid-Term Exam (Ch. 1-3) KEY: Midterm/Final | function | cost  
 BLM: Comprehension NOT: 978-0-618-65612-7

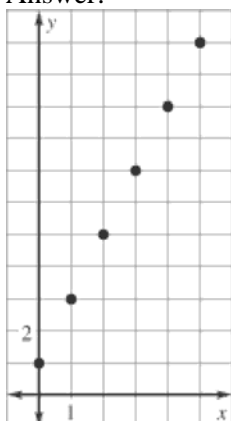
54. ANS:  
It will cost \$21.

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.11  
STA: CO.COMCS.MTH.95.9-12.2.3 | CO.COAF.MTH.05.9.2.3.a  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | function | cost  
BLM: Comprehension                    NOT: 978-0-618-65612-7

55. ANS:  
288 envelopes

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_2.Eng.12  
STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.3 | CO.COMCS.MTH.95.9-12.2.4 |  
CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | rate | function  
BLM: Comprehension                    NOT: 978-0-618-65612-7

56. ANS:  
Answer:



PTS: 1                    DIF: Level A                    REF: A1.MF.1\_2.Eng.13  
STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.4 | CO.COMCS.MTH.95.9-12.2.5 |  
CO.COAF.MTH.05.9.2.1.a | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | graph | function | domain | linear  
BLM: Comprehension                    NOT: 978-0-618-65612-7

57. ANS:  
-5

PTS: 1                    DIF: Level A                    REF: A1.MF.1\_3.Eng.17  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve  
BLM: Comprehension                    NOT: 978-0-618-65612-7

58. ANS:  
-8

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.18  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve  
BLM: Comprehension                    NOT: 978-0-618-65612-7

59. ANS:  
7.8
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.19  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve  
BLM: Comprehension                    NOT: 978-0-618-65612-7
60. ANS:  
12
- PTS: 1                    DIF: Level A                    REF: A1.MF.1\_3.Eng.20  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve  
BLM: Comprehension                    NOT: 978-0-618-65612-7
61. ANS:  
3
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.21  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve  
BLM: Comprehension                    NOT: 978-0-618-65612-7
62. ANS:  
-16
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.22  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve | distribute  
BLM: Comprehension                    NOT: 978-0-618-65612-7
63. ANS:  
all real numbers
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.23  
STA: CO.COAF.MTH.05.9.2.3.a                    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | equation | solve | distribute | like-term                    BLM: Comprehension  
NOT: 978-0-618-65612-7
64. ANS:  
 $-4\frac{1}{2}$
- PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.24  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | equation | solve | distribute | like-term  
BLM: Comprehension                    NOT: 978-0-618-65612-7
65. ANS:  
 $x = 6$
- PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.15  
TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
BLM: Comprehension                    NOT: 978-0-618-65612-7
66. ANS:  
 $a = 23$
- PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.16  
TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
BLM: Comprehension                    NOT: 978-0-618-65612-7

67. ANS:  
 $y = 6$

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.17  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

68. ANS:  
 $x = 20$

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.18  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

69. ANS:  
 $p = -4$

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.19  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

70. ANS:  
 $x = 8$

PTS: 1                    DIF: Level B            REF: A1.CR.1\_3.Eng.20  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

71. ANS:  
 $w = 15$

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.21  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

72. ANS:  
 $x = \frac{3}{2}$

PTS: 1                    DIF: Level A            REF: A1.CR.1\_3.Eng.22  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation | like-term  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

73. ANS:  
 No solution

PTS: 1                    DIF: Level B            REF: A1.CR.1\_3.Eng.23  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation | like-term  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

74. ANS:  
 51

PTS: 1                    DIF: Level A            REF: A1.MF.1\_3.Eng.25  
 STA: CO.COMCS.MTH.95.9-12.6.1    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
 KEY: Midterm/Final | proportion | solve    BLM: Comprehension  
 NOT: 978-0-618-65612-7

75. ANS:  
29

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.26  
STA: CO.COMCS.MTH.95.9-12.6.1                    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | proportion | solve                    BLM: Comprehension  
NOT: 978-0-618-65612-7

76. ANS:  
 $x = 20$

PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.24  
STA: CO.COMCS.MTH.95.9-12.6.1                    TOP: Chapters 1-3  
KEY: Cumulative Review | solve | equation | proportion                    BLM: Comprehension  
NOT: 978-0-618-65612-7

77. ANS:  
 $x = 1$

PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.25  
STA: CO.COMCS.MTH.95.9-12.6.1                    TOP: Chapters 1-3  
KEY: Cumulative Review | solve | equation | proportion                    BLM: Comprehension  
NOT: 978-0-618-65612-7

78. ANS:  
93.6

PTS: 1                    DIF: Level A                    REF: A1.MF.1\_3.Eng.27  
STA: CO.COMCS.MTH.95.9-12.6.1 | CO.COAF.MTH.05.9.6.1.a  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)                    KEY: Midterm/Final | percent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

79. ANS:  
65%

PTS: 1                    DIF: Level A                    REF: A1.MF.1\_3.Eng.28  
STA: CO.COMCS.MTH.95.9-12.6.1 | CO.COAF.MTH.05.9.6.1.a  
TOP: 9-Week/Mid-Term Exam (Ch. 1-3)                    KEY: Midterm/Final | percent  
BLM: Comprehension                    NOT: 978-0-618-65612-7

80. ANS:  
$$I = \frac{2(S - B)}{P}$$

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.29  
STA: CO.COAF.MTH.05.9.2.3.c                    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
KEY: Midterm/Final | solve | variable | formula                    BLM: Comprehension  
NOT: 978-0-618-65612-7

81. ANS:

$$r = \frac{C}{2\pi}$$

PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.29  
 STA: CO.COAF.MTH.05.9.2.3.a | CO.COAF.MTH.05.9.2.3.c    TOP: Chapters 1-3  
 KEY: Cumulative Review | solve | equation | variable                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

82. ANS:

$$y = \frac{3}{4}x + \frac{1}{2}$$

PTS: 1                    DIF: Level A                    REF: A1.MF.1\_3.Eng.30  
 STA: CO.COAF.MTH.05.9.2.3.a | CO.COAF.MTH.05.9.2.3.c    TOP: 9-Week/Mid-Term Exam (Ch. 1-3)  
 KEY: Midterm/Final | function                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

83. ANS:

a. 8 weeks

b.

Week	1	4	8
Cousin's earnings	30	105	205
Your earnings	27	108	216

PTS: 1                    DIF: Level B                    REF: A1.MF.1\_3.Eng.31  
 STA: CO.COMCS.MTH.95.9-12.5.1 | CO.COAF.MTH.05.9.2.3.a  
 TOP: 9-Week/Mid-Term Exam (Ch. 1-3)    KEY: Midterm/Final | solve | money | equation  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

84. ANS: C                    PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.31

STA: CO.COMCS.MTH.95.9-12.5.1 | CO.COAF.MTH.05.9.2.3.a  
 TOP: Chapters 1-3    KEY: Cumulative Review | equation                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

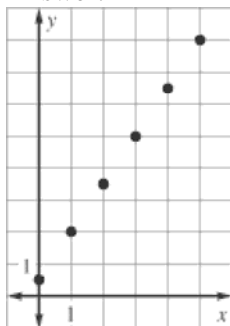
85. ANS:

112 seniors have paid

PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.05  
 STA: CO.COMCS.MTH.95.9-12.1.1 | CO.COMCS.MTH.95.9-12.2.3 | CO.COMCS.MTH.95.9-12.5.1 |  
 CO.COAF.MTH.05.9.2.3.a                    TOP: Chapters 1-3  
 KEY: Cumulative Review | equation | solve                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

86. ANS:

Answer:



PTS: 1 DIF: Level A REF: A1.CR.1\_3.Eng.06

STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.4 | CO.COMCS.MTH.95.9-12.2.5 |  
CO.COAF.MTH.05.9.2.1.a | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b

TOP: Chapters 1-3 KEY: Cumulative Review | function | domain | graph

BLM: Comprehension

NOT: 978-0-618-65612-7

87. ANS:

60

PTS: 1 DIF: Level A REF: A1.CR.1\_3.Eng.08

TOP: Chapters 1-3 KEY: Cumulative Review | multiplication | fraction

BLM: Comprehension

NOT: 978-0-618-65612-7

88. ANS:

 $-37\frac{1}{2}$  ft

PTS: 1 DIF: Level A REF: A1.CR.1\_3.Eng.12

STA: CO.COMCS.MTH.95.9-12.2.1 | CO.COMCS.MTH.95.9-12.6.1 | CO.COAF.MTH.05.9.5.1.b

TOP: Chapters 1-3 KEY: Cumulative Review | rate | multiplication

BLM: Comprehension

NOT: 978-0-618-65612-7

89. ANS:

11.7

PTS: 1 DIF: Level A REF: A1.CR.1\_3.Eng.26

STA: CO.COMCS.MTH.95.9-12.6.1 | CO.COAF.MTH.05.9.6.1.a

TOP: Chapters 1-3 KEY: Cumulative Review | solve | equation | percent

BLM: Comprehension

NOT: 978-0-618-65612-7

90. ANS:

160%

PTS: 1 DIF: Level A REF: A1.CR.1\_3.Eng.27

STA: CO.COMCS.MTH.95.9-12.6.1 | CO.COAF.MTH.05.9.6.1.a

TOP: Chapters 1-3 KEY: Cumulative Review | solve | equation | percent

BLM: Comprehension

NOT: 978-0-618-65612-7



91. ANS:  
125

PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.28  
 STA: CO.COMCS.MTH.95.9-12.6.1 | CO.COAF.MTH.05.9.6.1.a  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation | percent  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

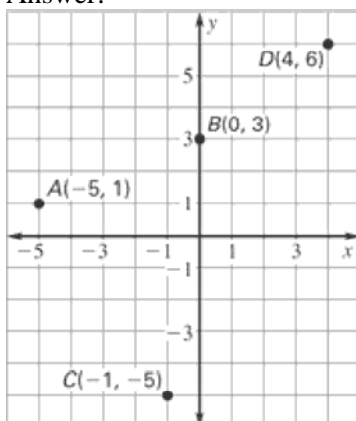
92. ANS:

$$y = \frac{3}{2}x - \frac{15}{2}$$

PTS: 1                    DIF: Level A                    REF: A1.CR.1\_3.Eng.30  
 STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.3.a | CO.COAF.MTH.05.9.2.3.c  
 TOP: Chapters 1-3    KEY: Cumulative Review | solve | equation | variable  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

93. ANS:

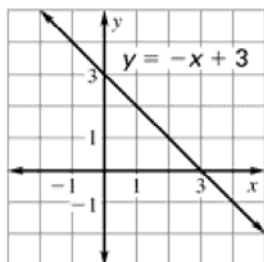
Answer:



PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.01  
 STA: CO.COMCS.MTH.95.9-12.2.5                    TOP: Chapters 4-6  
 KEY: Cumulative Review | coordinate | point | plot                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

94. ANS:

$x$	$y$
-1	4
0	3
1	2



PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.02

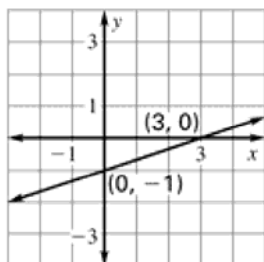
STA: CO.COAF.MTH.05.9.2.5.a TOP: Chapters 4-6

KEY: Cumulative Review | table | graph | equation | linear BLM: Comprehension

NOT: 978-0-618-65612-7

95. ANS:

Answer:



PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.03

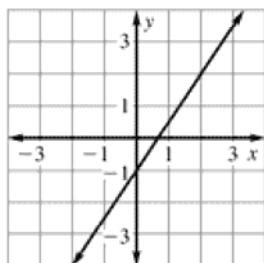
STA: CO.COAF.MTH.05.9.2.4.a TOP: Chapters 4-6

KEY: Cumulative Review | linear | line | graph | intercept BLM: Comprehension

NOT: 978-0-618-65612-7

96. ANS:

Answer:



PTS: 1 DIF: Level B REF: A1.CR.4\_6.Eng.04

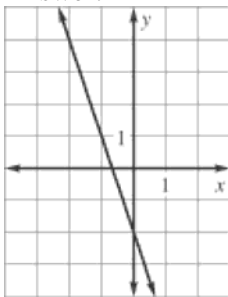
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KEY: Cumulative Review | linear | line | graph | intercept BLM: Comprehension

NOT: 978-0-618-65612-7

97. ANS:

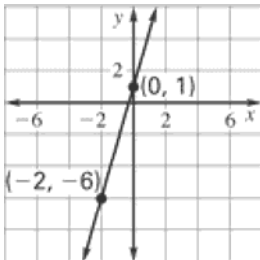
Answer:



PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.13  
 TOP: Chapters 4-6    KEY: Cumulative Review | graph | line | point-slope  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

98. ANS:

$$m = \frac{-6 - 1}{-2 - 0} = \frac{-7}{-2} = \frac{7}{2}$$



PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.05  
 STA: CO.COMCS.MTH.95.9-12.2.5                    TOP: Chapters 4-6  
 KEY: Cumulative Review | plot | points | line | slope | graph                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

99. ANS:

The lines are not parallel because they have different slopes.

PTS: 1                    DIF: Level B                    REF: A1.CR.4\_6.Eng.06  
 TOP: Chapters 4-6    KEY: Cumulative Review | parallel | slope | equation | linear  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

100. ANS:

$$y = 3x$$

PTS: 1                    DIF: Level B                    REF: A1.CR.4\_6.Eng.07  
 STA: CO.COAF.MTH.05.9.6.1.c                    TOP: Chapters 4-6  
 KEY: Cumulative Review | direct variation                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

101. ANS:

$$f(3) = -1$$

$$f(0) = 2$$

$$f(-4) = 6$$

PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.08

STA: CO.COMCS.MTH.95.9-12.2.3 | CO.COAF.MTH.05.9.2.3.a

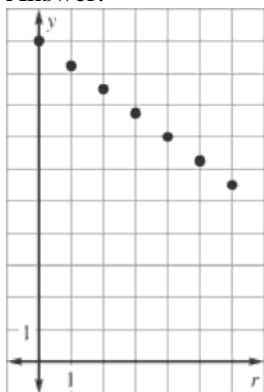
TOP: Chapters 4-6 KEY: Cumulative Review | evaluate | function

BLM: Comprehension

NOT: 978-0-618-65612-7

102. ANS:

Answer:



PTS: 1 DIF: Level B REF: A1.CR.4\_6.Eng.09

STA: CO.COMCS.MTH.95.9-12.2.2 | CO.COMCS.MTH.95.9-12.2.4 | CO.COMCS.MTH.95.9-12.2.5 |

CO.COAF.MTH.05.9.2.1.a | CO.COAF.MTH.05.9.2.2.a | CO.COAF.MTH.05.9.2.2.b

TOP: Chapters 4-6 KEY: Cumulative Review | graph | function | rate

BLM: Comprehension

NOT: 978-0-618-65612-7

103. ANS:

$$y = 2x - 1$$

PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.10

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.4.a

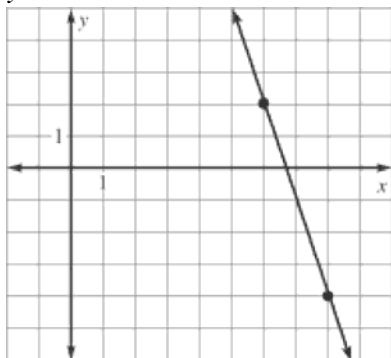
TOP: Chapters 4-6 KEY: Cumulative Review | slope-intercept | slope | y-intercept | equation | linear

BLM: Comprehension

NOT: 978-0-618-65612-7

104. ANS:

$$y = -3x + 20$$



PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.11

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.3.c

TOP: Chapters 4-6 KEY: Cumulative Review | line | point | equation | line | slope-intercept

BLM: Comprehension

NOT: 978-0-618-65612-7

105. ANS:

$$y = \frac{1}{2}x - 4$$

PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.12

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.3.c

TOP: Chapters 4-6 KEY: Cumulative Review | line | point | equation | line | slope-intercept

BLM: Comprehension

NOT: 978-0-618-65612-7

106. ANS:

$$x - 4y = 8$$

PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.14

TOP: Chapters 4-6 KEY: Cumulative Review | standard form | equation | linear

BLM: Comprehension

NOT: 978-0-618-65612-7

107. ANS:

$$y = \frac{1}{2}x + 9$$

PTS: 1 DIF: Level B REF: A1.CR.4\_6.Eng.15

STA: CO.COMCS.MTH.95.9-12.2.5 TOP: Chapters 4-6

KEY: Cumulative Review | equation | line | perpendicular | point

BLM: Comprehension

NOT: 978-0-618-65612-7

108. ANS:

$$5x + 10y = 220$$

PTS: 1 DIF: Level A REF: A1.CR.4\_6.Eng.16

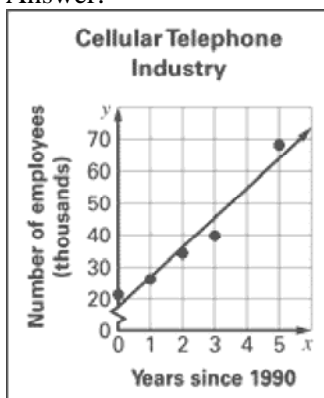
TOP: Chapters 4-6 KEY: Cumulative Review | money | standard form | equation

BLM: Comprehension

NOT: 978-0-618-65612-7

109. ANS:

Answer:



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.17

STA: CO.COAF.MTH.05.9.3.1.c

TOP: Chapters 4-6

KEY: Cumulative Review | graph | scatter plot

BLM: Comprehension

NOT: 978-0-618-65612-7

110. ANS:

$$y = 9425x + 16,875$$

PTS: 1

DIF: Level B

REF: A1.CR.4\_6.Eng.18

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.3.c

TOP: Chapters 4-6 KEY: Cumulative Review | equation | line | slope-intercept

BLM: Comprehension

NOT: 978-0-618-65612-7

111. ANS:

54,575 employees; interpolation

PTS: 1

DIF: Level B

REF: A1.CR.4\_6.Eng.19

TOP: Chapters 4-6 KEY: Cumulative Review | linear | interpolation | extrapolation

BLM: Comprehension

NOT: 978-0-618-65612-7

112. ANS:

$$x < 13$$



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.20

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

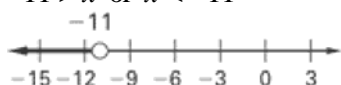
TOP: Chapters 4-6 KEY: Cumulative Review | solve | graph | inequality | number line

BLM: Comprehension

NOT: 978-0-618-65612-7

113. ANS:

$$-11 > x \text{ or } x < -11$$



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.21

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

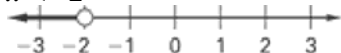
TOP: Chapters 4-6 KEY: Cumulative Review | solve | graph | inequality | number line

BLM: Comprehension

NOT: 978-0-618-65612-7

114. ANS:

$$x < -2$$



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.22

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

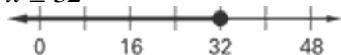
TOP: Chapters 4-6 KEY: Cumulative Review | solve | graph | inequality | number line

BLM: Comprehension

NOT: 978-0-618-65612-7

115. ANS:

$$x \leq 32$$



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.23

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

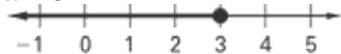
TOP: Chapters 4-6 KEY: Cumulative Review | solve | graph | inequality | number line

BLM: Comprehension

NOT: 978-0-618-65612-7

116. ANS:

$$x \leq 3$$



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.24

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

TOP: Chapters 4-6 KEY: Cumulative Review | solve | graph | inequality | number line

BLM: Comprehension

NOT: 978-0-618-65612-7

117. ANS:

$$-\frac{2}{5} > x \text{ or } x < -\frac{2}{5}$$



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.25

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

TOP: Chapters 4-6 KEY: Cumulative Review | solve | graph | inequality | number line

BLM: Comprehension

NOT: 978-0-618-65612-7

118. ANS:

$$-2 \leq x \leq \frac{1}{2}$$

$x$  is greater than or equal to  $-2$  and less than or equal to  $\frac{1}{2}$ .

PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.26  
 STA: CO.COMCS.MTH.95.9-12.2.1                    TOP: Chapters 4-6  
 KEY: Cumulative Review | solve | describe | inequality                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

119. ANS:

$$x < 2 \text{ or } x > 5$$

PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.27  
 STA: CO.COMCS.MTH.95.9-12.2.1                    TOP: Chapters 4-6  
 KEY: Cumulative Review | solve | describe | inequality                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

120. ANS:

$$x = 7, x = -1$$

PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.28  
 STA: CO.COMCS.MTH.95.9-12.2.1                    TOP: Chapters 4-6  
 KEY: Cumulative Review | absolute value | equation | solve                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

121. ANS:

$$x \leq 21 \text{ and } x \geq -5; -5 \leq x \leq 21$$

PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.29  
 STA: CO.COMCS.MTH.95.9-12.2.1                    TOP: Chapters 4-6  
 KEY: Cumulative Review | absolute value | inequality | solve                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

122. ANS:

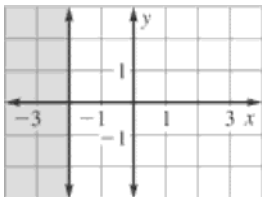
$$x > 10 \text{ or } x < -4$$

PTS: 1                    DIF: Level A                    REF: A1.CR.4\_6.Eng.30  
 STA: CO.COMCS.MTH.95.9-12.2.1                    TOP: Chapters 4-6  
 KEY: Cumulative Review | inequality | solve | absolute value                    BLM: Comprehension  
 NOT: 978-0-618-65612-7



123. ANS:

Answer:



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.31

STA: CO.COMCS.MTH.95.9-12.2.5 | CO.COAF.MTH.05.9.2.5.a

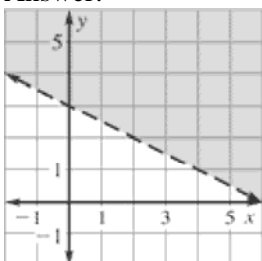
TOP: Chapters 4-6 KEY: Cumulative Review | inequality | graph | coordinate plane

BLM: Comprehension

NOT: 978-0-618-65612-7

124. ANS:

Answer:



PTS: 1

DIF: Level A

REF: A1.CR.4\_6.Eng.32

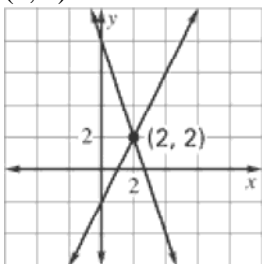
TOP: Chapters 4-6 KEY: Cumulative Review | inequality | graph | coordinate plane

BLM: Comprehension

NOT: 978-0-618-65612-7

125. ANS:

(2, 2)



PTS: 1

DIF: Level A

REF: A1.CR.7\_9.Eng.01

STA: CO.COAF.MTH.05.9.2.3.b

TOP: Chapters 7-9

KEY: Cumulative Review | linear | system | graph | solve,

BLM: Comprehension

NOT: 978-0-618-65612-7

126. ANS:

(-2, 3)

PTS: 1

DIF: Level A

REF: A1.CR.7\_9.Eng.02

STA: CO.COAF.MTH.05.9.2.3.b

TOP: Chapters 7-9

KEY: Cumulative Review | linear | system | substitution | solve,

BLM: Comprehension

NOT: 978-0-618-65612-7

127. ANS:  
 (-3, 2)

PTS: 1                    DIF: Level A                    REF: A1.CR.7\_9.Eng.03  
 STA: CO.COAF.MTH.05.9.2.3.b                    TOP: Chapters 7-9  
 KEY: Cumulative Review | linear | system | elimination | solve,    BLM: Comprehension  
 NOT: 978-0-618-65612-7

128. ANS:  
 $\left(\frac{5}{1}, 1\right)$

PTS: 1                    DIF: Level A                    REF: A1.CR.7\_9.Eng.04  
 STA: CO.COAF.MTH.05.9.2.3.b                    TOP: Chapters 7-9  
 KEY: Cumulative Review | linear | system | elimination | solve,    BLM: Comprehension  
 NOT: 978-0-618-65612-7

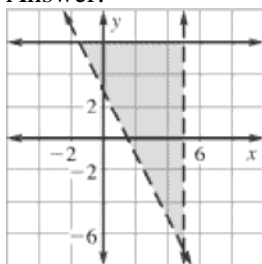
129. ANS:  
 No solution

PTS: 1                    DIF: Level B                    REF: A1.CR.7\_9.Eng.05  
 STA: CO.COAF.MTH.05.9.2.3.b                    TOP: Chapters 7-9  
 KEY: Cumulative Review | linear | system | solve,                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

130. ANS:  
 12 feet and 30 feet

PTS: 1                    DIF: Level B                    REF: A1.CR.7\_9.Eng.06  
 STA: CO.COAF.MTH.05.9.2.3.a                    TOP: Chapters 7-9  
 KEY: Cumulative Review | fractions | equation | solve                    BLM: Comprehension  
 NOT: 978-0-618-65612-7

131. ANS:  
 Answer:



PTS: 1                    DIF: Level A                    REF: A1.CR.7\_9.Eng.07  
 TOP: Chapters 7-9    KEY: Cumulative Review | graph | inequality | system  
 BLM: Comprehension                    NOT: 978-0-618-65612-7

132. ANS:

$$x \geq 0$$

$$y \geq 0$$

$$y \leq \frac{2}{3}x + 4$$

$$x \leq 6$$

PTS: 1

DIF: Level B

REF: A1.CR.7\_9.Eng.08

TOP: Chapters 7-9 KEY: Cumulative Review | graph | inequality | system

BLM: Comprehension

NOT: 978-0-618-65612-7