MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Evaluate.

1) \(-12 + 60 + (-3)\)
   A) 32  B) -32  C) -16  D) 16

2) \(22 + 13 \cdot 22 - (-8)\)
   A) 278  B) 778  C) 65  D) 316

3) \(6 + 7^2 - (-5) \cdot 7\)
   A) 350  B) 175  C) 90  D) 20

4) \(\frac{1}{6} + \frac{4}{5} - 6 \left(\frac{1}{2}\right)^2\)
   A) \(-\frac{211}{24}\)  B) \(-\frac{139}{96}\)  C) \(-\frac{31}{30}\)  D) \(-\frac{31}{24}\)

Evaluate the expression for the given value of the variable or variables.

5) \(5x^2 + 18x; \quad x = \frac{2}{5}\)
   A) 4  B) 8  C) 9  D) \(\frac{18}{5}\)

6) \(t^2 - 2y; \quad t = 8, y = -2\)
   A) 12  B) 20  C) 60  D) 68

7) \(a^2 - 4abc - c^2; \quad a = -6, b = 3, c = 5\)
   A) 371  B) -349  C) 421  D) 299

Solve the problem.

8) If the sales tax on an item is 4%, then the total cost, including sales tax, of an item costing \(d\) dollars can be found by the expression \(d + 0.04d\). Determine the total costs of a camera that costs $230. Round your answer to the nearest cent.
   A) $236.90  B) $322.00  C) $241.50  D) $239.20

9) If a rock falls from a height of 90 meters above the ground, the height, in meters, after \(x\) seconds can be found using the expression \(90 - 4.9x^2\). What is the height of the rock after 4 seconds?
   A) 70.4 m  B) 11.6 m  C) -294.16 m  D) 1361.6 m

Use the distributive property to remove parentheses.

10) \(- (9x + 4y)\)
    A) \(-9x - 4y\)  B) \(-9x + 4y\)  C) \(-9x + 4y\)  D) \(9x + 4y\)

Simplify.

11) \(-10(6r + 7) + 10(10r + 8)\)
    A) \(40r + 7\)  B) \(-130r\)  C) \(40r + 10\)  D) \(-4r - 3\)
12) \(\left(\frac{6}{7} x - \frac{1}{10}\right) + 2x\)

A) \(\frac{8}{7} x + \frac{1}{10}\)  
B) \(\frac{20}{7} x + \frac{1}{10}\)  
C) \(\frac{87}{70} x\)  
D) \(-\frac{4}{7} x - \frac{1}{10}\)

Solve the equation.

13) \(13(4c - 9) = 2c - 2\)

A) \(c = \frac{115}{54}\)  
B) \(c = -\frac{23}{10}\)  
C) \(c = \frac{119}{50}\)  
D) \(c = \frac{23}{10}\)

14) \(8p = 7(9p + 2)\)

A) \(p = \frac{14}{55}\)  
B) \(p = \frac{7}{4}\)  
C) \(p = -\frac{14}{55}\)  
D) \(p = \frac{55}{14}\)

15) \((y - 4) - (y + 8) = 5y\)

A) \(y = \frac{3}{5}\)  
B) \(y = -6\)  
C) \(y = -3\)  
D) \(y = -\frac{12}{5}\)

16) \(\frac{2x}{5} = \frac{x}{3} + 2\)

A) \(x = 60\)  
B) \(x = 30\)  
C) \(x = -60\)  
D) \(x = -30\)

17) \(\frac{3(y - 2)}{5} = 1 - 3y\)

A) \(y = \frac{11}{18}\)  
B) \(y = \frac{11}{6}\)  
C) \(y = \frac{7}{6}\)  
D) \(y = -\frac{11}{18}\)

Use the formula to find the value of the variable indicated. Use a calculator to save time and where necessary, round your answer to the nearest hundredth.

18) \(V = \frac{1}{3} Bh\); find \(h\) when \(V = 48\) and \(B = 12\).

A) \(h = 0.33\)  
B) \(h = 0.75\)  
C) \(h = 0.08\)  
D) \(h = 12\)

Solve for the indicated variable.

19) \(A = \frac{1}{2} bh\), for \(b\)

A) \(b = \frac{A}{2h}\)  
B) \(b = \frac{h}{2A}\)  
C) \(b = \frac{2A}{h}\)  
D) \(b = \frac{Ah}{2}\)

20) \(A = P(1 + nr)\), for \(r\)

A) \(r = \frac{A - P}{Pn}\)  
B) \(r = \frac{P - A}{Pn}\)  
C) \(r = \frac{Pn}{A - P}\)  
D) \(r = \frac{A}{n}\)

21) \(F = \frac{9}{5} C + 32\), for \(C\)

A) \(C = \frac{F - 32}{9}\)  
B) \(C = \frac{9}{5}(F - 32)\)  
C) \(C = \frac{5}{9}(F - 32)\)  
D) \(C = \frac{5}{F - 32}\)
Solve the equation for y.
22) \(-5x + 10y = 0\)
   A) \(y = -2x\)  
   B) \(y = 2x\)  
   C) \(y = \frac{x}{2}\)  
   D) \(y = 2x + 5\)

Write a proportion that can be used to solve the problem. Then solve the equation to obtain the answer.
23) A bag of fertilizer covers 2500 square feet of lawn. Find how many bags of fertilizer should be purchased to cover a rectangular lawn 330 feet by 90 feet.
   A) 119 bags  
   B) 1188 bags  
   C) 11 bags  
   D) 12 bags

24) On an architect's blueprint, 1 inch corresponds to 4 feet. Find the length of a wall represented by a line \(\frac{1}{4}\) inches long on the blueprint. Round to the nearest tenth.
   A) 25 feet  
   B) 6.4 feet  
   C) 17.5 feet  
   D) 156.3 feet

Solve the inequality and graph the solution on a number line.
25) \(-9x \geq 63\)
   A) \(x \geq -7\)  
   B) \(x \leq -7\)  
   C) \(x \geq 7\)  
   D) \(x \leq 7\)

26) \(-8x - 1 > -9x - 9\)
   A) \(x \geq -10\)  
   B) \(x < -8\)  
   C) \(x \leq -10\)  
   D) \(x > -8\)
27) $3x + 6 < 33$

A) $x > 9$
B) $x < 9$
C) $x \leq 9$
D) $x \geq 9$

Write an equation to represent the problem.

28) Scot and Elizabeth ate dinner at an upscale bistro. The cost of their meals plus a 22% tip was $66.98.

A) $x + 2.2x = 66.98$
B) $x + 0.22 = 66.98$
C) $x + 0.22x = 66.98$
D) $x + 22x = 66.98$

29) Seven times a number is 12 more than two times that number.

A) $7x = 2(x + 12)$
B) $7x + 12 = 2x$
C) $7 + x = 2x + 12$
D) $7x = 2x + 12$

30) Jennifer Park’s 2007 income was 7.9% greater than her 2006 income. Her income in 2007 was $76,600. Let $i$ represent 2006 income.

A) $i + 0.079i = 76,600$
B) $i + 0.079\cdot 76,600 = 76,600$
C) $2i + 0.079i = 76,600$
D) $i - 0.079i = 76,600$

Set up an equation that can be used to solve the problem. Solve the equation and answer the question asked.

31) Five more than six times a number is that number increased by 37.

A) $6x + 5 = x + 37; \frac{32}{5}$
B) $6x + 5 = 37x; \frac{5}{26}$
C) $6x - 5 = x + 37; \frac{42}{5}$
D) $6(x + 5) = x + 37; -\frac{18}{5}$

32) Mary and her brother John collect foreign coins. Mary has four times the number of coins that John has. Together they have 175 foreign coins. Find how many coins Mary has.

A) 133 coins
B) 140 coins
C) 28 coins
D) 35 coins

33) When Milo got promoted at work, he received a 5% pay raise. He now earns $71,400 per year. What was his annual salary before his raise?

A) $68,000$
B) $3400$
C) $71,400$
D) $3570$

34) A motorcycle traveling at 60 miles per hour overtakes a car traveling at 40 miles per hour that had a three-hour head start. How far from the starting point are the two vehicles?

A) 9 miles
B) 360 miles
C) 6 miles
D) 72 miles

35) Alexander and Judy are 29 miles apart on a calm lake paddling toward each other. Alexander paddles at 5 miles per hour, while Judy paddles at 8 miles per hour. How long will it take them to meet?

A) 2.2 hours
B) 16 hours
C) 1.4 hours
D) 9.7 hours
36) At a gourmet nut shop, nuts are sold in bulk. Cashews sell for $1.30 per pound and macadamia nuts sell for $8.60 per pound. Lee wishes to purchase 5 pounds of mixed nuts by mixing 3.5 pounds of cashews and 1.5 pounds of macadamia nuts. What will be the price per pound of the mixture?
A) $6.41  B) $3.49  C) $32.05  D) $17.45

Find the slope of the line through the given points.
37) (-5, 9) and (8, 3)
A) \( m = \frac{6}{13} \)  B) \( m = -\frac{6}{13} \)  C) \( m = 4 \)  D) \( m = -\frac{13}{6} \)

38) (3, -6), (7, -3)
A) \( m = \frac{3}{4} \)  B) \( m = \frac{9}{10} \)  C) \( m = \frac{10}{9} \)  D) \( m = \frac{4}{3} \)

Determine the slope and y-intercept of the line represented by the given equation.
39) \( 4x - 6y = 24 \)
A) \( m = \frac{2}{3}; y\text{-intercept is (0, -4)} \)  B) \( m = \frac{3}{2}; y\text{-intercept is (0, 6)} \)
C) \( m = 4; y\text{-intercept is (0, 24)} \)  D) \( m = -\frac{2}{3}; y\text{-intercept is (0, 4)} \)

40) \( y = \frac{5}{6}x - \frac{5}{2} \)
A) \( m = \frac{6}{5}; y\text{-intercept is (0, }\frac{5}{2}\text{)} \)  B) \( m = -\frac{5}{6}; y\text{-intercept is (0, }\frac{5}{2}\text{)} \)
C) \( m = -\frac{5}{2}; y\text{-intercept is (0, }\frac{5}{2}\text{)} \)  D) \( m = \frac{5}{6}; y\text{-intercept is (0, }-\frac{5}{2}\text{)} \)

Determine whether the pair of lines are parallel, perpendicular, or neither.
41) \( -5x + y = 8 \)
\( -5x + y + 7 = 0 \)
A) parallel  B) perpendicular  C) neither

42) \( 3x - 4y = -18 \)
\( 8x + 6y = -18 \)
A) parallel  B) perpendicular  C) neither
Determine the equation of the line.

43) A) $y = 3x + 2$  
B) $y = \frac{1}{3}x + 2$  
C) $y = -3x + 2$  
D) $y = 3x$

44) A) $y = 2x$  
B) $y = -2x$  
C) $y = \frac{1}{2}x$  
D) $y = -\frac{1}{2}x$
Graph by plotting points. Plot at least three points for the graph.

45) \(-x + y = -1\)

A)

B)

C)

D)
46) $3x + 2y = 10$
47) \( y = -\frac{3}{5}x + 3 \)
Identify the system of linear equations as consistent, inconsistent, or dependent. State whether the system has exactly one solution, no solution, or an infinite number of solutions.

48) __________

A) consistent—one solution
B) dependent—infinite number of solutions
C) inconsistent—no solution

49) __________

A) inconsistent—no solution
B) consistent—one solution
C) dependent—infinite number of solutions
50) _______

A) inconsistent—no solution
B) consistent—one solution
C) dependent—infinites number of solutions

Find the solution to the system of equations by substitution.

51) \( x + y = 8 \)
\( y = 3x \)
A) \((-2, -6)\)  B) \((2, -6)\)  C) \((-2, 6)\)  D) \((2, 6)\)

Solve the system of equations using the addition method.

52) \( x - 5y = -1 \)
\(-7x - 5y = -33 \)
A) \((-1, 4)\)  B) \((4, 1)\)  C) \((5, 0)\)  D) no solution

53) \( x + 5y = 38 \)
\(-6x + 4y = 44 \)
A) \((-3, 9)\)  B) \((-2, 8)\)  C) \((2, 9)\)  D) no solution

54) \( 2x + 8y = -12 \)
\( 2x + 2y = 18 \)
A) \((-14, 2)\)  B) \((14, -5)\)  C) \((-5, 14)\)  D) \((-14, 8)\)

Express the exercise as a system of linear equations, then find the solution. Use a calculator where appropriate.

55) A flat rectangular piece of aluminum has a perimeter of 58 inches. The length is 9 inches longer than the width. Find the width.
A) 29 in.  B) 10 in.  C) 28 in.  D) 19 in.

Simplify.

56) \(-4z^{-3}\)
A) \(-\frac{64}{z^3}\)  B) \(-\frac{1}{64z^3}\)  C) \(\frac{1}{64z^3}\)  D) \(-\frac{4}{z^3}\)

57) \(3x^{-6}y^8z^{-8}\)^{-3}
A) \(\frac{x^{18}z^{24}}{-9y^{-24}}\)  B) \(\frac{x^{18}y^{24}}{27y^{24}}\)  C) \(\frac{y^{11}}{27x^9z^{11}}\)  D) \(\frac{y^{11}}{-9x^9z^{11}}\)
\[58) \frac{(4xy^2)^2}{2xy^3}\]

A) \(\frac{y}{32x^3}\)  
B) \(-\frac{8y}{x^3}\)  
C) \(\frac{y}{32}\)  
D) \(-\frac{4}{x^3y^{-7}}\)

Subtract.

\[59) (8r^2 + 7r - 1) - (-4r^2 + 2)\]

A) \(12r^2 + 5r - 1\)  
B) \(4r^2 + 7r + 1\)  
C) \(12r^2 + 7r - 3\)  
D) \(4r^2 + 5r - 1\)

Add.

\[60) (-5x^2 - 8x + 6) + (7x^2 - 8x - 7)\]

A) \(2x^4 - 16x^2 - 1\)  
B) \(2x^2 - 16x - 1\)  
C) \(2x^2 - 8x - 1\)  
D) \(-35x^2 - 8x - 1\)

Subtract.

\[61) \left(3x + \frac{5}{7}\right) - \left(3x - \frac{6}{7}\right)\]

A) \(\frac{11}{7}\)  
B) \(-\frac{11}{7}\)  
C) \(-\frac{1}{7}\)  
D) \(6x - \frac{1}{7}\)

Multiply.

\[62) 2x^9(-4x^2)\]

A) \(-8x^{18}\)  
B) \(-8x^{11}\)  
C) \(8x^{11}\)  
D) \(8x^{18}\)

\[63) (x^2 - 5x + 1)(9x)\]

A) \(9x^3 + 46x^2 + 9x\)  
B) \(9x^3 - 44x^2 + 4x\)  
C) \(9x^3 - 45x^2 - 14x\)  
D) \(9x^3 - 45x^2 + 9x\)

\[64) 8x^4(3x^5 - 5)\]

A) \(24x^5 - 40\)  
B) \(24x^9 - 40x^4\)  
C) \(-16x^4\)  
D) \(24x^9 - 5\)

\[65) (x + 11)(x - 5)\]

A) \(x^2 + 5x - 55\)  
B) \(x^2 + 6x + 6\)  
C) \(x^2 + 6x - 55\)  
D) \(x^2 - 55x + 6\)

\[66) (6x + 7)(4x - 3)\]

A) \(24x^2 + 10x + 10\)  
B) \(10x^2 + 10x + 10\)  
C) \(24x^2 + 10x - 21\)  
D) \(10x^2 + 10x - 21\)

Multiply using a special product formula.

\[67) (5p + 6)(5p - 6)\]

A) \(25p^2 - 36\)  
B) \(25p^2 - 60p - 36\)  
C) \(p^2 - 36\)  
D) \(25p^2 + 60p - 36\)

\[68) (3x + 2.3)(3x - 2.3)\]

A) \(9x^2 - 4.6\)  
B) \(9x^2 - 13.8x - 5.29\)  
C) \(9x^2 - 52.9\)  
D) \(9x^2 - 5.29\)
69) $(x - 8)^2$
   A) $x^2 - 16x + 64$  
   B) $x + 64$  
   C) $x^2 + 64$  
   D) $64x^2 - 16x + 64$

70) $(4x + 5)^2$
   A) $16x^2 + 40x + 25$  
   B) $4x^2 + 40x + 25$  
   C) $4x^2 + 25$  
   D) $16x^2 + 25$

Factor the GCF from each term in the expression.

71) $80x - 20$
   A) $20(4x)$  
   B) $4(20x - 5)$  
   C) $20(4x - 1)$  
   D) $5(16x - 4)$

72) $12x^8y^7z - 20x^7y^6$
   A) $4xy(3x^7y^7z - 5x^6y^5)$  
   B) $4x^7y^6(3xyz - 5)$  
   C) $4x^7y^6z(3xy - 5)$  
   D) $x^7y^6(12xyz - 20)$

73) $8m^9 - 14m^6 + 20m^2$
   A) No common factor  
   B) $2m^2(4m^7 - 7m^4 + 10)$  
   C) $m^2(8m^7 - 14m^4 + 20)$  
   D) $2(4m^9 - 7m^6 + 10m^2)$

Factor the polynomial. If the polynomial is prime, so state.

74) $x^2 + 6x - 16$
   A) $(x + 8)(x - 2)$  
   B) $(x - 8)^2$  
   C) $(x - 8)(x - 2)$  
   D) prime

75) $40 + 39x + x^2$
   A) $(x + 40)(x + 1)$  
   B) $(x + 40)(x - 1)$  
   C) $(x + 8)(x + 5)$  
   D) prime

Factor completely. If the polynomial is prime, so state.

76) $15x^2 + 22x + 8$
   A) $(3x - 2)(5x - 4)$  
   B) $(3x + 2)(5x + 4)$  
   C) $(15x + 2)(x + 4)$  
   D) prime

77) $6x^2 - x - 22$
   A) $(6x + 2)(x - 11)$  
   B) $(6x - 11)(x + 2)$  
   C) $(6x + 11)(x - 2)$  
   D) $(6x - 2)(x + 11)$

Solve.

78) $90n^2 + 78n = 0$
   A) $-\frac{13}{15}$, 0  
   B) $-\frac{13}{15}$, 78  
   C) $\frac{13}{15}$  
   D) 0

79) $x^2 + 2x - 24 = 0$
   A) $-6, 4$  
   B) $6, -4$  
   C) 6, 4  
   D) $-6, 1$

80) $2x^2 - 9x = 5$
   A) $-\frac{1}{2}, 2$  
   B) $-\frac{1}{2}, 5$  
   C) $\frac{1}{9}, -\frac{1}{2}$  
   D) $-2, 5$

81) $(x + 4)^2 = 4$
   A) $-4$  
   B) $-6$  
   C) 6, 2  
   D) $-6, -2$

13
Solve the problem.
82) If the sides of a square are increased by 2 meters, the area becomes 100 square meters. Find the length of a side of the original square.
   A) 12 m  B) 10 m  C) 2 m  D) 8 m

83) The cost C of manufacturing x units of a certain product is given by $C = x^2 - 10x + 1200$. Find the number of units manufactured at a cost of $6800.
   A) 80 units  B) 30 units  C) 40 units  D) 70 units

Add or subtract.
84) $\frac{5y}{b} + \frac{9b}{2}$
   A) $\frac{5y + 9b}{2b}$  B) $\frac{10y + 9b^2}{2b}$  C) $\frac{10y + 9b}{2b}$  D) $10y + 9b^2$

85) $\frac{42}{7x} + \frac{48}{6x}$
   A) $\frac{14}{x}$  B) $\frac{14}{2x}$  C) $\frac{588}{42x}$  D) $\frac{14}{x^2}$

86) $\frac{3}{x+7} + 8$
   A) $\frac{8x + 59}{x + 7}$  B) $\frac{11}{x + 7}$  C) $\frac{8x + 77}{x + 7}$  D) $\frac{8x + 53}{x + 7}$

Solve the equation and check your solution.
87) $\frac{2x}{9} + 5 = \frac{1}{2}$
   A) $x = -\frac{89}{4}$  B) $x = -\frac{81}{4}$  C) $x = \frac{9}{2}$  D) $x = \frac{93}{4}$

88) $\frac{x - 4}{6} = \frac{x + 2}{4}$
   A) $x = -14$  B) $x = \frac{2}{3}$  C) $x = 5$  D) $x = \frac{7}{6}$

89) $5 + \frac{2}{x} = \frac{15}{4}$
   A) $x = \frac{8}{11}$  B) $x = \frac{8}{5}$  C) $x = -\frac{8}{35}$  D) $x = -\frac{8}{5}$

90) $\frac{2}{t} = \frac{t}{5t - 12}$
   A) $t = 0, \ t = \frac{24}{9}$  B) $t = 4, \ t = 6$  C) $t = 0, \ t = 36$  D) $t = 0$
Solve the problem and answer the question.

91) A car travels 400 miles on level terrain in the same amount of time it travels 160 miles on mountainous terrain. If the rate of the car is 30 miles per hour less in the mountains than on level ground, find its rate in the mountains.

A) 40 mph  B) 50 mph  C) 80 mph  D) 20 mph

92) A barge takes 5 hours to move (at a constant rate) downstream for 55 miles, helped by a current of 3 miles per hour. If the barge’s engines are set at the same pace, find the time of its return trip against the current.

A) 5 hr  B) 110 hr  C) 11 hr  D) 8 hr

93) One pump can drain a pool in 12 minutes. When a second pump is also used, the pool only takes 9 minutes to drain. How long would it take the second pump to drain the pool if it were the only pump in use?

A) 105 min  B) $\frac{1}{36}$ min  C) 36 min  D) $5\frac{1}{7}$ min

94) A baker can decorate the day’s cookie supply four times as fast as his new assistant. If they decorate all the cookies working together in 20 minutes, how long would it take for each of them to decorate the cookies working individually?

A) baker: 100 min  assistant: 400 min  
C) baker: 25 min  assistant: 100 min  
B) baker: 100 min  assistant: 25 min  
D) baker: $6\frac{1}{4}$ min  assistant: 25 min

95) Simplify.

A) $x^6$  B) $x^4$  C) $\frac{x^4}{2}$  D) $x^{16}$

96) $\sqrt{150x^2}$

A) $5\sqrt{6x^2}$  B) $5\sqrt{6}$  C) $5x\sqrt{6}$  D) $5x^2\sqrt{6}$

97) $\sqrt{x^4y^5z^6}$

A) $x^2y^2z^2\sqrt{yz^3}$  B) $x^2y^3z^4$  C) $x^2y^2z^3\sqrt{y}$  D) $x^2z^3\sqrt{y^5}$

98) Simplify the expression.

A) $8\sqrt{5x}$  B) $4\sqrt{5}$  C) $8x\sqrt{10}$  D) $12\sqrt{10x}$

99) $-3\sqrt{5} - 6\sqrt{45}$

A) $21\sqrt{5}$  B) $6\sqrt{5}$  C) $-21\sqrt{5}$  D) $-9\sqrt{5}$

100) $\sqrt{5a} - 3\sqrt{180a} - 4\sqrt{80a}$

A) $-7\sqrt{265a}$  B) $-33\sqrt{265a}$  C) $-7\sqrt{5a}$  D) $-33\sqrt{5a}$
1) B  
Objective: (1.9) Learn the Order of Operations

2) D  
Objective: (1.9) Learn the Order of Operations

3) C  
Objective: (1.9) Learn the Order of Operations

4) D  
Objective: (1.9) Learn the Order of Operations

5) B  
Objective: (1.9) Evaluate Expressions Containing Variables

6) D  
Objective: (1.9) Evaluate Expressions Containing Variables

7) A  
Objective: (1.9) Evaluate Expressions Containing Variables

8) D  
Objective: (1.9) Evaluate Expressions Containing Variables

9) B  
Objective: (1.9) Evaluate Expressions Containing Variables

10) B  
Objective: (2.1) Remove Parentheses When They Are Preceded by a Plus or Minus Sign

11) C  
Objective: (2.1) Simplify an Expression

12) A  
Objective: (2.1) Simplify an Expression

13) D  
Objective: (2.5) Solve Equations with the Variable on Both Sides of the Equal Sign

14) C  
Objective: (2.5) Solve Equations with the Variable on Both Sides of the Equal Sign

15) D  
Objective: (2.5) Solve Equations with the Variable on Both Sides of the Equal Sign

16) B  
Objective: (2.5) Solve Equations Containing Decimal Numbers or Fractions

17) A  
Objective: (2.5) Solve Equations Containing Decimal Numbers or Fractions

18) D  
Objective: (2.6) Solve for a Variable in a Formula

19) C  
Objective: (2.6) Solve for a Variable in a Formula

20) A  
Objective: (2.6) Solve for a Variable in a Formula

21) C  
Objective: (2.6) Solve for a Variable in a Formula

22) C  
Objective: (2.6) Solve for a Variable in a Formula

23) D  
Objective: (2.7) Solve Applications

24) A  
Objective: (2.7) Solve Applications

25) B  
Objective: (2.8) Solve Linear Inequalities

26) D  
Objective: (2.8) Solve Linear Inequalities

27) B  
Objective: (2.8) Solve Linear Inequalities

28) C  
Objective: (3.1) Translate Applications Into Equations

29) D  
Objective: (3.1) Translate Applications Into Equations

30) A  
Objective: (3.1) Translate Applications Into Equations

31) A  
Objective: (3.2) Set Up and Solve Number Application Problems

32) B  
Objective: (3.2) Set Up and Solve Number Application Problems

33) A  
Objective: (3.2) Set Up and Solve Applications Concerning Percent

34) B  
Objective: (3.4) Solve Motion Problems Involving Two Rates

35) A  
Objective: (3.4) Solve Motion Problems Involving Two Rates

36) B  
Objective: (3.4) Solve Mixture Problems

37) B  
Objective: (4.3) Find the Slope of a Line

38) A  
Objective: (4.3) Find the Slope of a Line

39) A  
Objective: (4.4) Write a Linear Equation in Slope-Intercept Form
40) D  
Objective: (4.4) Write a Linear Equation in Slope-Intercept Form

41) A  
Objective: (4.4) Use the Slope-Intercept Form to Determine the Equations of a Line

42) B  
Objective: (4.4) Use the Slope-Intercept Form to Determine the Equations of a Line

43) A  
Objective: (4.4) Use the Slope-Intercept Form to Determine the Equations of a Line

44) D  
Objective: (4.4) Use the Slope-Intercept Form to Determine the Equations of a Line

45) C  
Objective: (4.2) Graph Linear Equations Plotting Points

46) D  
Objective: (4.2) Graph Linear Equations Plotting Points

47) D  
Objective: (4.2) Graph Linear Equations Plotting Points

48) C  
Objective: (5.1) Determine if a System of Equations is Consistent, Inconsistent, or Dependent

49) B  
Objective: (5.1) Determine if a System of Equations is Consistent, Inconsistent, or Dependent

50) C  
Objective: (5.1) Determine if a System of Equations is Consistent, Inconsistent, or Dependent

51) D  
Objective: (5.2) Solve Systems of Equations by Substitution

52) B  
Objective: (5.3) Solve Systems of Equations by the Addition Method

53) B  
Objective: (5.3) Solve Systems of Equations by the Addition Method

54) B  
Objective: (5.3) Solve Systems of Equations by the Addition Method

55) B  
Objective: (5.4) Use Systems of Equations to Solve Application Problems

56) D  
Objective: (6.2) Simplify Expressions Containing Negative Exponents

57) B  
Objective: (6.2) Simplify Expressions Containing Negative Exponents

58) A  
Objective: (6.2) Simplify Expressions Containing Negative Exponents

59) C  
Objective: (6.4) Subtract Polynomials

60) B  
Objective: (6.4) Add Polynomials

61) A  
Objective: (6.4) Subtract Polynomials

62) B  
Objective: (6.5) Multiply a Monomial by a Monomial

63) D  
Objective: (6.5) Multiply a Polynomial by a Monomial

64) B  
Objective: (6.5) Multiply a Polynomial by a Monomial

65) C  
Objective: (6.5) Multiply Binomials Using the Distributive Property

66) C  
Objective: (6.5) Multiply Binomials Using the Distributive Property

67) A  
Objective: (6.5) Multiply Binomials Using Formulas for Special Products

68) D  
Objective: (6.5) Multiply Binomials Using Formulas for Special Products

69) A  
Objective: (6.5) Multiply Binomials Using Formulas for Special Products

70) A  
Objective: (6.5) Multiply Binomials Using Formulas for Special Products

71) C  
Objective: (7.1) Factor a Monomial from a Polynomial

72) B  
Objective: (7.1) Factor a Monomial from a Polynomial

73) B  
Objective: (7.1) Factor a Monomial from a Polynomial

74) A  
Objective: (7.3) Factor Trinomials of the Form ax^2 + bx + c, where a = 1

75) D  
Objective: (7.3) Factor Trinomials of the Form ax^2 + bx + c, where a = 1
76) B
Objective: (7.4) Factor Trinomials of the Form $ax^2 + bx + c$, $a \neq 1$, by Trial and Error

77) C
Objective: (7.4) Factor Trinomials of the Form $ax^2 + bx + c$, $a \neq 1$, by Trial and Error

78) A
Objective: (7.6) Solve Quadratic Equations Using Factoring

79) A
Objective: (7.6) Solve Quadratic Equations Using Factoring

80) B
Objective: (7.6) Solve Quadratic Equations Using Factoring

81) D
Objective: (7.6) Solve Quadratic Equations Using Factoring

82) D
Objective: (7.7) Solve Applications by Factoring Quadratic Equations

83) A
Objective: (7.7) Solve Applications by Factoring Quadratic Equations

84) B
Objective: (8.4) Add and Subtract Rational Expressions

85) A
Objective: (8.4) Add and Subtract Rational Expressions

86) A
Objective: (8.4) Add and Subtract Rational Expressions

87) B
Objective: (8.6) Solve Rational Equations with Integer Denominators

88) A
Objective: (8.6) Solve Rational Equations with Integer Denominators

89) D
Objective: (8.6) Solve Rational Equations Where a Variable Appears in a Denominator

90) B
Objective: (8.6) Solve Rational Equations Where a Variable Appears in a Denominator

91) D
Objective: (8.7) Set Up and Solve Motion Problems

92) C
Objective: (8.7) Set Up and Solve Motion Problems

93) C
Objective: (8.7) Set Up and Solve Work Problems

94) C
Objective: (8.7) Set Up and Solve Work Problems

95) B
Objective: (9.2) Use the Product Rule to Simplify Square Roots Containing Variables

96) C
Objective: (9.2) Use the Product Rule to Simplify Square Roots Containing Variables

97) C
Objective: (9.2) Use the Product Rule to Simplify Square Roots Containing Variables

98) A
Objective: (9.3) Add and Subtract Square Roots

99) C
Objective: (9.3) Add and Subtract Square Roots

100) D
Objective: (9.3) Add and Subtract Square Roots