Fall Semester Exam Review Answers without work

1.
   a. 11, 112
   b. 0, 11, 112
   c. -3, -2, 0, 11, 112
   d. -3, -2, -1.5, 0, $\frac{1}{4}$, 11, 112
   e. $\sqrt{2}$
   f. All numbers in the given set
2.
   a. 2, 7, 8
   b. 0, 2, 7, 8
   c. -185, 0, 2, 7, 8
   d. -185, -$\frac{1}{5}$, 0, 2, 7, 8
   e. $\sqrt{3}$
   f. All number in the given set
3.
   a. 4
   b. 5
   c. 0
   d. 5.6
4.
   a. $\frac{1}{2}$
   b. 5
   c. 8
   d. $\frac{2}{3}$
5.
   a. $2 \cdot 2 \cdot 2 \cdot 5$
   b. $3 \cdot 3 \cdot 7$
6.
   a. $2 \cdot 2 \cdot 11$
   b. $2 \cdot 3 \cdot 3 \cdot 5$
7. $\frac{8}{20}$
8. $\frac{16}{24}$
9. 66
10. 20
11. x = 2
12. x ≠ 3
13.
   a. - 3
   b. -10
   c. 2
   d. 7
14.
   a. 10
   b. $\frac{1}{2}$
   c. 2x
   d. – 6
   e. 5
   f. $\frac{2}{3}$
   g. a
   h. – 3
15.
   a. 9.9
   b. $-\frac{4}{5}$
   c. $\frac{2}{15}$
   d. -11.1
   e. $-\frac{1}{5}$
   f. $\frac{3}{4}$
16.
   a. 52^{o}
   b. 118^{o}
   c. 18^{o}
   d. 133^{o}
17.
   a. -0.06
   b. $-\frac{7}{15}$
   c. 16
   d. -0.36
   e. $\frac{6}{17}$
18.
   a. 6
   b. - 12
   c. $-\frac{8}{15}$
   d. $-\frac{1}{6}$

e. -4
f. 9
g. $\frac{10}{63}$

19.

a. 5 + x
b. $x \cdot 3$
c. 1 + y
d. $4 \cdot y$

20.

a. 8(2 + x)
b. 7(s + t)
c. $4\left(y + \frac{1}{3}\right)$
d. $0.10(x + y)$

21.

a. -2x – 1
b. -15x – 2

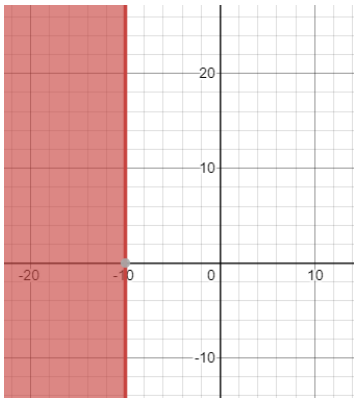
22.

a. -1.6
b. $-\frac{1}{6}$
c. 8
d. 3
e. 140
f. 72
g. 2
h. 5

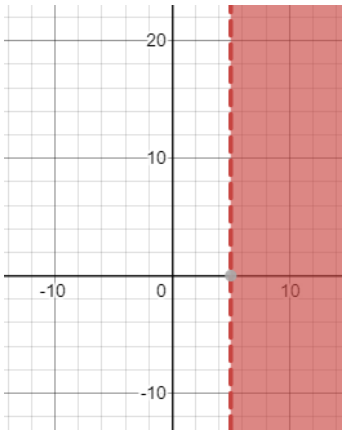
23. 10
24. 6
25.

a. $l = \frac{V}{wh}$
b. $r = \frac{C}{2\pi}$

26.

a. 

(- ∞, -10]

b. 

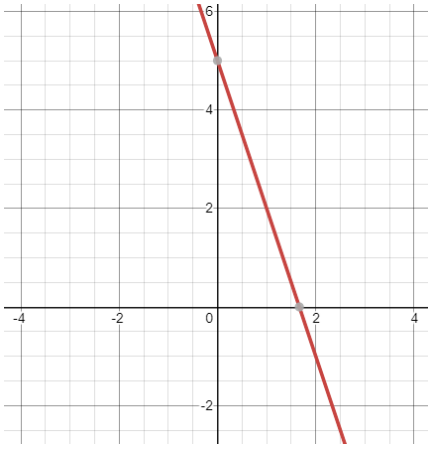
(5, ∞)

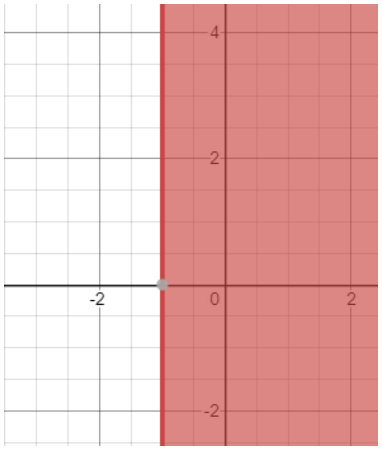
27.

a. <
b. >
c. >

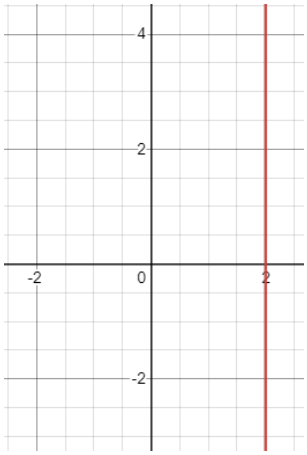
28. $\frac{7}{8}$
29. $\frac{2}{39}$
30. $\frac{25}{7}$
31. $\frac{8}{3}$
32. 23
33.

a. -1119
b. 30
c. -0.5
d. $-\frac{4}{5}$
e. 6.7
f. $\frac{1}{40}$

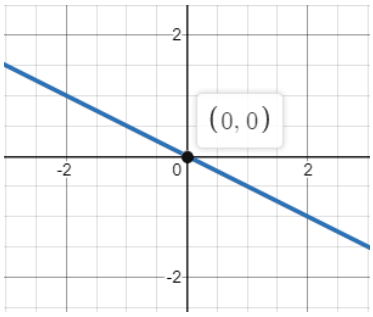
34. 21
35.
    a. -6
    b. 6.3
36. -4
37.
    a. -6
    b. 0
    c. $\frac{3}{4}$
38. Yes
39.
    a. 22 + x
    b. -21x
40. 19 – 3x
41.
    a. -3
    b. 22
    c. 1
    d. -1
    e. $\frac{1}{7}$
42. -5x + 35
43. 17
44. $\frac{10}{3}$
45. 6
46. -24
47. 3x + 3
48. No solution
49. 0
50. $y = \frac{6-x}{2}$
51. 247 Republicans and 188 Democrats
52. $\left(-\infty, \frac{8}{3}\right]$
53. $40\ ft$
54. $\left(-\frac{1}{2}, \frac{3}{4}\right]$
55. $x = \frac{y-b}{m}$
56. $0, 5, 2$
57. 40% solution: 8 liters;
    70% solution: 4 liters
58. 

59. 

[-1, ∞)
60. (-4, 0) & (0, -2)
61. 

[1, 4)
62. 

63.
    a. Solution
    b. Not a solution
    c. Solution

64. $\frac{1}{5}$
65.
    a. Yes
    b. Yes
    c. No
    d. Yes
66. Undefined slope
67. 0
68. $m = \frac{2}{5}, y - intercept: (0, -2)$
69. $y = \frac{1}{4}x - 3$
70. 3x – 2y = 0
71.
    a. <
    b. =
    c. >
72.
    a. 25
    b. 32
73.
    a. Commutative property of multiplication
    b. Associative property of addition
    c. Identify element for addition
    d. Commutative property of multiplication
    e. Multiplicative inverse property
    f. Additive inverse property
    g. Commutative and associative properties of multiplication
74. 1
75. -2x – 1
76. -14
77. 8
78. -31
79. 6
80. -1.2y – 7
81. 12
82. 40
83. 10
84. No solution
85. $x = \frac{y-b}{m}$
86. -5
87. $[2, \infty)$
88. B=P-a-c
89. 

90. [-8, ∞)
91. $m = -\frac{8}{3}$
92. $0, 0, 9$
93. Slope: $m = \frac{3}{4}; y - intercept: (0, 6)$
94. m = $-\frac{11}{3}$
95. Slope: $m = \frac{3}{4}; y - intercept: (0, -1)$
96. Slope: m = 7; y-intercept: (0, 0)
97. y = -2x + 3; 2x + y = 3
98. parallel
99. x = -1
100. y = -5x – 7
101. domain: {-1, 0, 3}
     range: {-2, 0, 2, 3}
102. -6 and 14
103.
    a. Function
    b. Not a function
104.
    a. No
    b. Yes
    c. No
105. One solution
106.
    a. Yes
    b. No
    c. No

107.

a. $\left(6, \frac{1}{2}\right)$
b. $(-2, -4)$
c. $(6, 1)$
d. $\left(-\frac{44}{3}, -\frac{7}{3}\right)$

108.

a. Yes
b. Yes

109. 17 and 11 are the two numbers.

110. 29 and 8 are the two numbers.

111.

a. 25
b. -25
c. 50

112. Undefined slope

113. z^4

114. $9x^2 - 6x - 1$

115. $4y^2 - 8$

116. $-6x^7$

117.

a. -4
b. -4

118. $12x^3 - 12x^2 - 9x + 2$

119.

a. $100x^4 - 9$
b. $4x^2 - 4xy + y^2$
c. $100x^4 + 60x^2 + 9$

120. $3m + 1$

121.

a. $\frac{1}{5}$
b. $\frac{1}{49}$