COORDINATE ALGEBRA Name_____ ID: 1

ISS DAY 1

Date_____ Period____

Evaluate each expression.

1) $5 \times 6 \div 6$

2) $(6 - 3)^2$

3) $(2 - 1) \times 3$

4) $(5 - 3)^3$

5) $10 \div (5 - 3)$

6) $4 + 1 + 2$

7) $10 \div (1 + 1)$

8) $(4 \times 2) \div 4$

9) $(2 \times 2) \div 4$

10) $6 \times 2 - 5$

Solve each equation.

11) $-31 = m - 17$

12) $5n = 15$

13) $2 = n - 11$

14) $17 = 18 + k$

15) $18k = 252$

16) $27 = -3n$

17) $k + 1 = -1$

18) $-11 = \frac{m}{16}$

19) $-19 + n = -29$

20) $k + 15 = 13$

21) $\frac{n}{8} = \frac{19}{8}$

22) $\frac{x}{13} = -7$

23) $-4 = -2b$

24) $18 = \frac{n}{11}$

25) $v + 5 = -9$

26) $-3 = b + 8$

27) $-14 = n - 8$

28) $-13 = n + 3$

29) $\frac{p}{18} = -3$

30) $-18 = \frac{m}{19}$

31) $-7(3r + 8) - 5r = 152$

32) $3(8v + 4) = -156$

33) $-8(-6r - 3) = 168$

34) $3(6 + 5x) = 93$

35) $8(-6x + 2) = -368$

36) $-4x + 8(8 - 3x) = 92$

37) $8(2 + 8x) = 272$

38) $8(7n + 6) = 272$

39) $-3(1 - 6v) = -93$

40) $1 + 3(8x + 7) = -170$

41) $8 + 2n = 4n - 6$

42) $4n + 5 = 5n$

43) $m - 2 - 1 = 1 + 3m$

44) $7p - 2p = -14 + 7p$

45) $6 - 4n = 14 - 5n$

46) $1 - 7n = -n + 1$

47) $4 - 7b = -5b + 10$

48) $15 + 8n = 7n + 7$

49) $-11 + 1 + 5b - 5 = 5 + b$

50) $6 + 1 - 8r + 8r = 4 + 3r$

51) $a - 3 = 13 - 8a + 7a$

52) $2x + 7 = x + 12$

53) $-4r - 2r = -4r + 8$

54) $16 - 7x = -2x + 1$

55) $4v + 8 + 3 + 12 = v - 1 + 6$

56) $14 - k = k - 2 + 2k$

57) $2 - k = k - 5 - 3$

58) $-2n + 6 = -5n + 3 + 2n + 11$

59) $2x = 5 - 3x$

60) $8n + 6n + 16 = 8n + 8n$

Solve each equation for the indicated variable.

61) $k + a = v + w$, for a

62) $k + x = v + w$, for x

63) $c + x = r - d$, for x

64) $ac = r + d$, for a

65) $ac = r - d$, for a

66) $u = b + a - k$, for a

67) $a + c = d + r$, for a

68) $u = b - ka$, for a

69) $kx = w - v$, for x

70) $\frac{k}{x} = w - v$, for x

71) $\frac{c}{x} = r + d$, for x

72) $g = \frac{cx}{y}$, for x

73) $u = y + \frac{k}{x}$, for x

74) $cx = d - r$, for x

75) $x - k = v - w$, for x

76) $z = xmy$, for x

77) $\frac{m}{x} = p - n$, for x

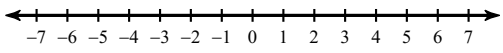
78) $k - x = w + v$, for x

79) $a - c = d - r$, for a

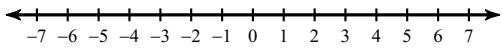
80) $am = pn$, for a

Draw a graph for each inequality.

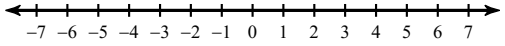
81) $x > 3$



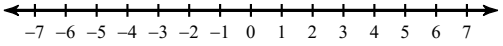
82) $x \leq 4$



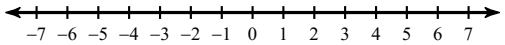
83) $b \geq -5$



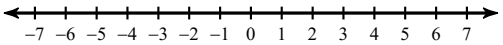
84) $a \leq 1$



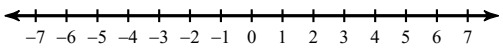
85) $a \geq 3$



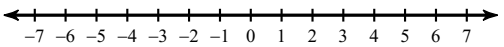
86) $a < -1$



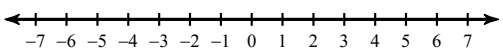
87) $v < -2$



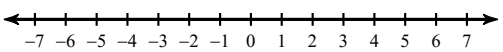
88) $v \geq -3$



89) $r < 6$

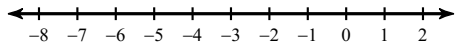


90) $p < -6$

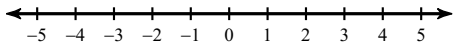


Solve each inequality and graph its solution.

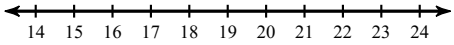
91) $p + 8 \geq 2$



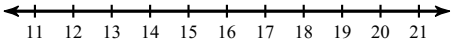
92) $18b \geq 18$



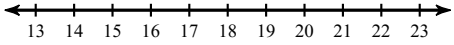
93) $15 \geq r - 2$



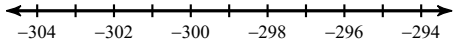
94) $r - 4 \leq 14$



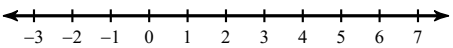
95) $x + 10 < 29$



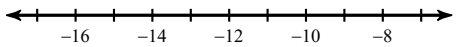
96) $-20 < \frac{x}{15}$



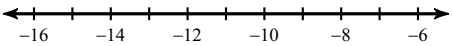
97) $-9 < n - 14$



98) $4 \leq 13 + p$



99) $154 > -14x$



100) $\frac{x}{13} \leq -8$