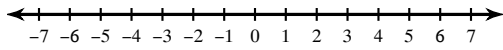


Assignment

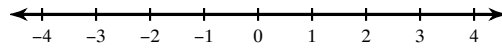
Date _____ Period _____

Draw a graph for each inequality.

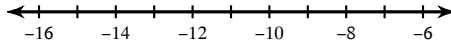
1) $m \leq -5$



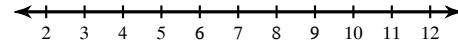
2) $2.66 \leq x$

**Solve each inequality and graph its solution.**

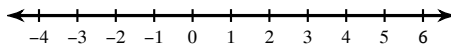
3) $94 \leq 2(7 - 5p)$



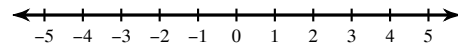
4) $283 \geq 3 + 8(-5 + 8n)$



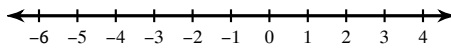
5) $-13 + 5n < -8(7n - 6)$



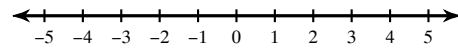
6) $27 + 2b \leq -5 - 8(-2b - 4)$



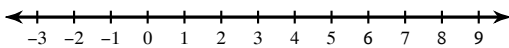
7) $6(-12p + 4) \geq 10p - 8(-3 + 6p)$



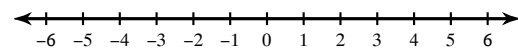
8) $-9(n + 10) - 9(n - 10) \leq 3n - 3n$

**Solve each compound inequality and graph its solution.**

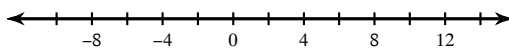
9) $-4 \leq x - 5 \leq -1$



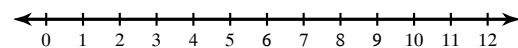
10) $p + 6 > 8$ or $2 + p < 2$



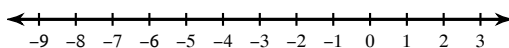
11) $-1 + 12n \geq 119$ or $6 - n \geq 13$



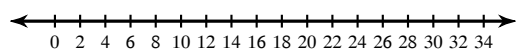
12) $-n + 2 \leq -3$ or $11n - 9 < 24$



13) $13x + 16 \leq -4x - 18$ and $7x - 9 < 13 + 5x$

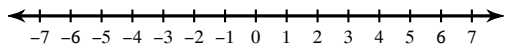


14) $9x + 19 > 10x - 14$ and $-14x + 8 \leq -19 + 13x$

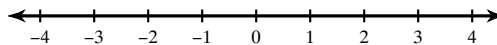


Draw a graph for each inequality.

15) $x \geq -5$

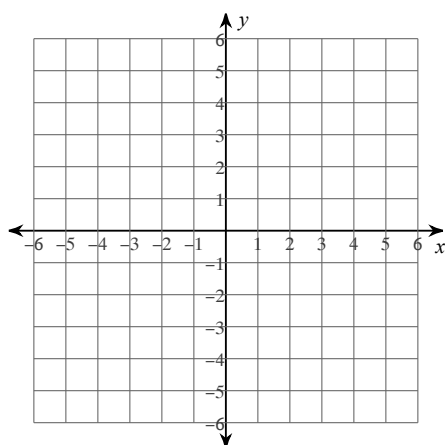


16) $-1.2 \geq p$

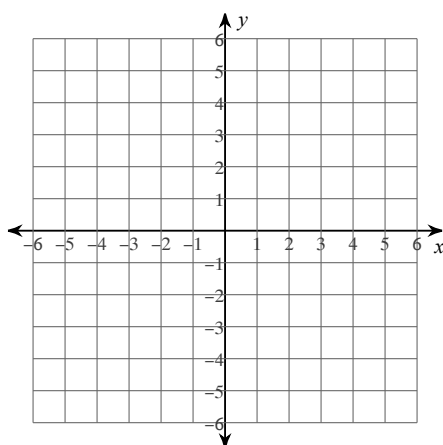


Sketch the graph of each linear inequality.

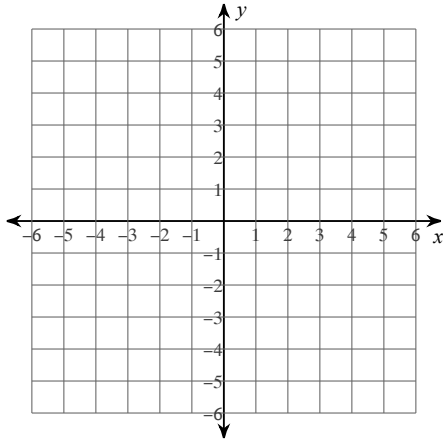
17) $y > \frac{9}{5}x + 4$



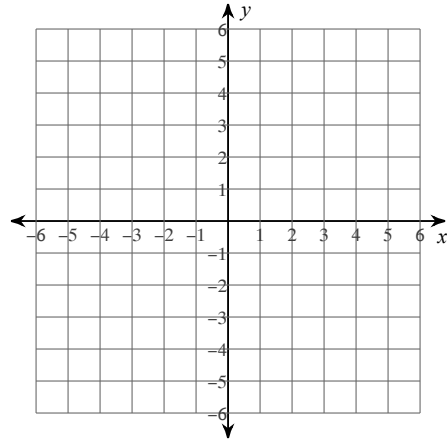
18) $y \geq -\frac{3}{2}x + 1$



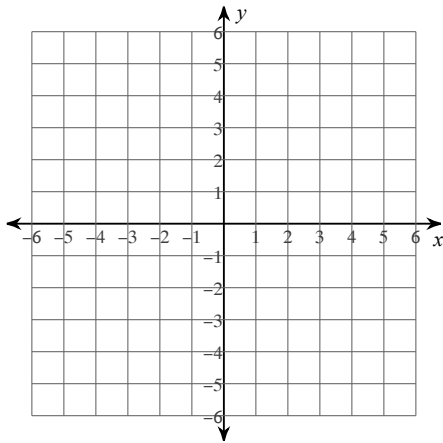
19) $y < -\frac{3}{5}x - 4$



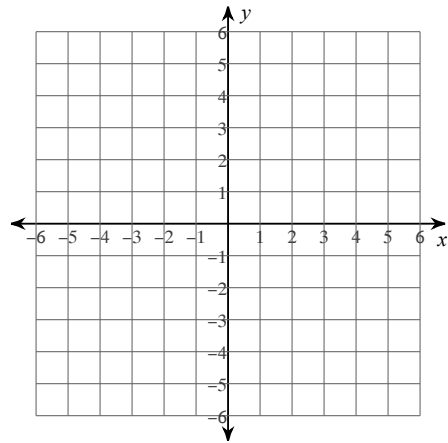
20) $y < \frac{3}{2}x - 5$



21) $6x + y < 5$

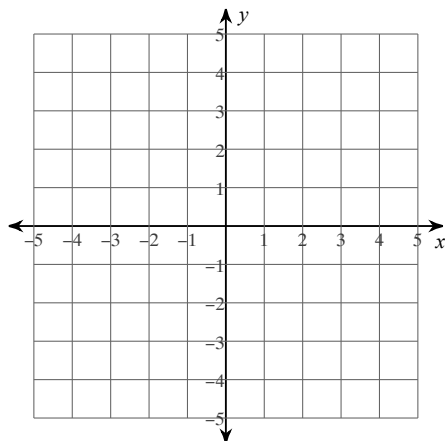


22) $2x + y < -4$

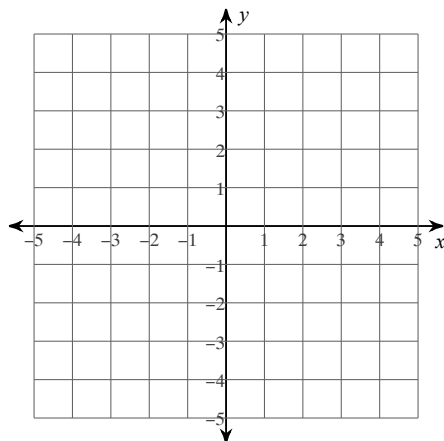


Sketch the solution to each system of inequalities.

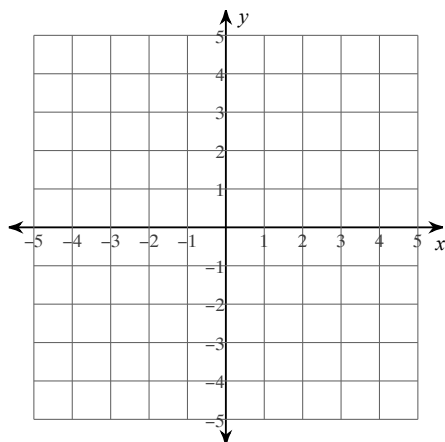
23) $y > -3x - 2$
 $y < 2x + 3$



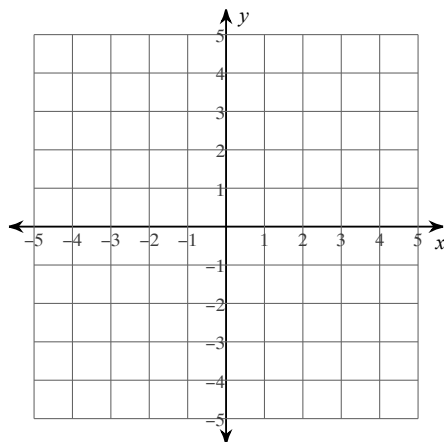
24) $y \leq -4x - 1$
 $y \geq 3$



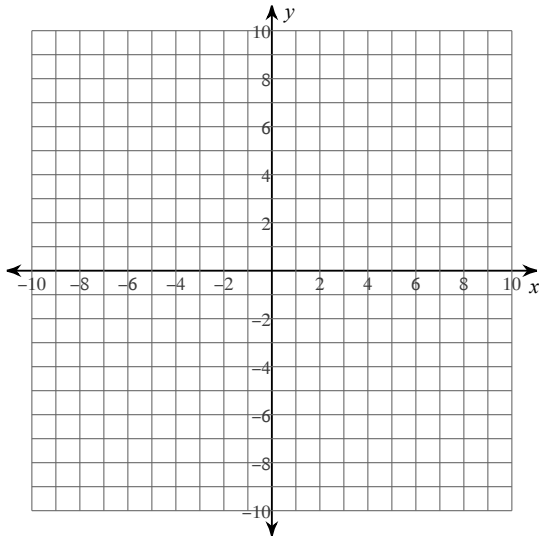
25) $y \geq -\frac{1}{3}x + 3$
 $x \geq 3$



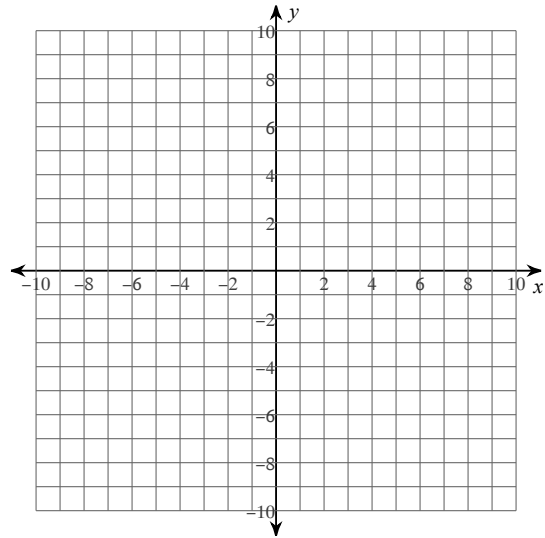
26) $y \geq \frac{1}{3}x + 3$
 $y \leq \frac{1}{3}x + 1$



27) $4x + y \leq 6$
 $2x - 3y \geq 24$



28) $x - 7y \geq -56$
 $9x + 7y \leq -14$



Solve each system by substitution.

29) $y = 2x + 4$
 $y = 4x + 8$

30) $y = 3x + 8$
 $y = 4x + 10$

31) $2x - 5y = 5$
 $4x + y = -23$

32) $3x + 4y = -19$
 $x + 5y = -10$

33) $4x - 7y = 22$
 $6x - 5y = 0$

34) $6x + 5y = -16$
 $-7x - 5y = 12$

Solve each system by elimination.

35) $-x + 3y = 5$
 $x - 2y = -4$

36) $x - 2y = 1$
 $-3x + 2y = -3$

37) $-6x - 2y = -16$
 $x + 3y = 0$

38) $-7x + y = -14$
 $-14x + 5y = -28$

39) $5x = -6y - 5$
 $8y = 7 + 7x$

40) $0 = -51 + 27y + 15x$
 $-\frac{2}{7}x = 1 - \frac{1}{7}y$

Solve each system by graphing.

41) $y = x - 2$
 $y = -4x + 3$

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

43) $y = 7x + 6$
 $y = -2x - 3$

44) $y = \frac{1}{2}x + 9$
 $y = -\frac{5}{2}x - 3$

45) $y + 3x = -1$
 $-9 = -5x + y$

46) $-18 + 3x = -3y$
 $y + 9 + 6x = 0$

47) Anjali and Matt each improved their yards by planting daylilies and ornamental grass. They bought their supplies from the same store. Anjali spent \$58 on 4 daylilies and 2 bunches of ornamental grass. Matt spent \$28 on 1 daylily and 2 bunches of ornamental grass. What is the cost of one daylily and the cost of one bunch of ornamental grass?

48) The sum of two numbers is 14. Their difference is 2. Find the numbers.

49) When you reverse the digits in a certain two-digit number you increase its value by 27. Find the number if the sum of its digits is 13.

50) When you reverse the digits in a certain two-digit number you decrease its value by 18. What is the number if the sum of its digits is 12?

Solve each equation.

51) $|3x| = 3$

52) $\left|\frac{b}{6}\right| = 1$

53) $|6 - 6n| = 24$

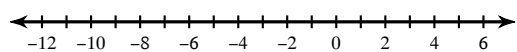
54) $|b - 2| = 11$

55) $\frac{|3 - b|}{8} = 4$

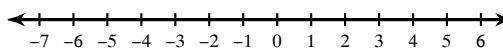
56) $\frac{|4 + 3x|}{4} = 5$

Solve each inequality and graph its solution.

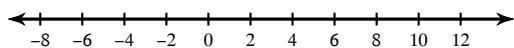
57) $|n + 2| \geq 5$



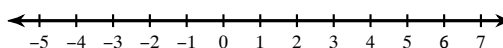
58) $\left|\frac{n}{5}\right| < 1$



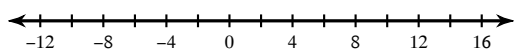
59) $|-x + 2| \leq 8$



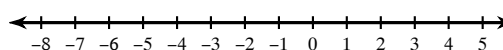
60) $|3 - 7x| < 25$



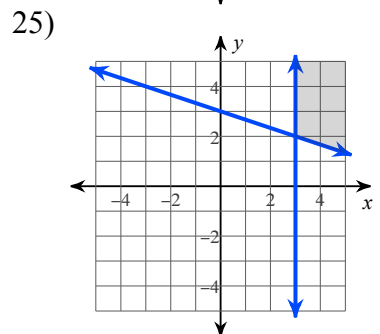
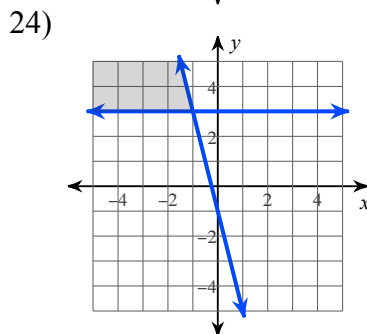
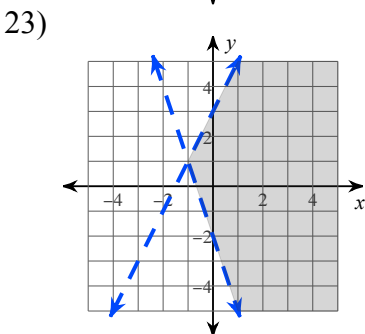
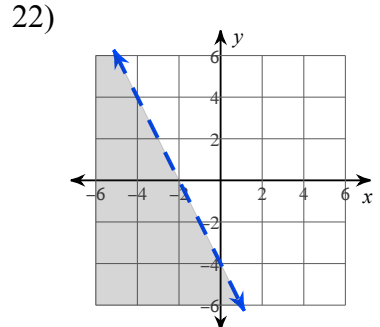
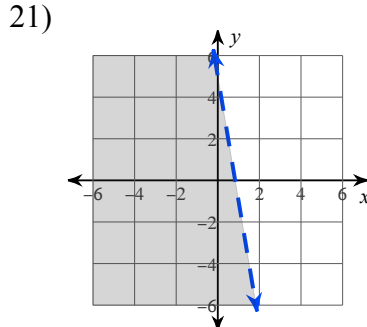
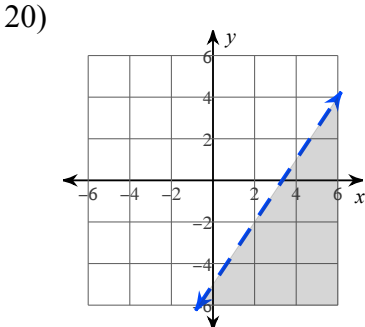
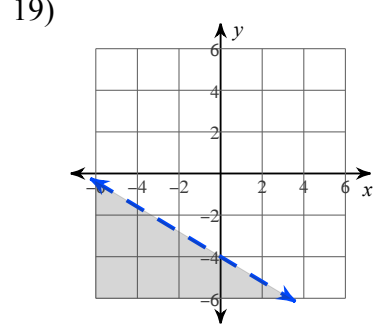
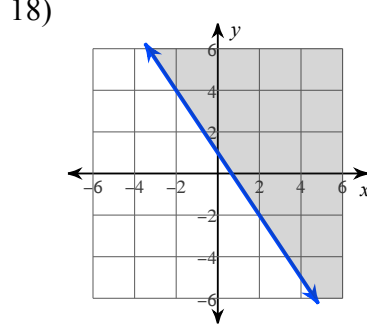
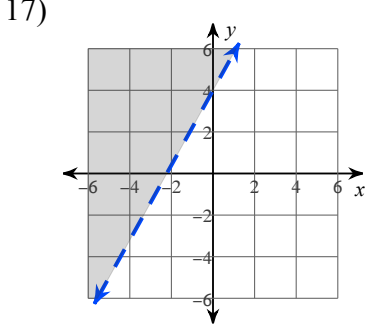
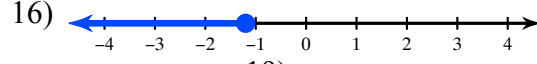
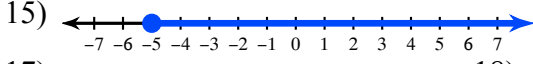
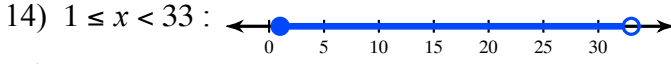
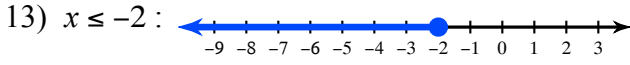
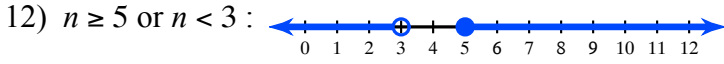
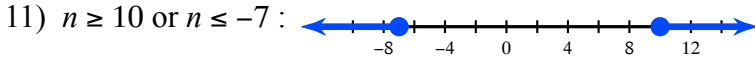
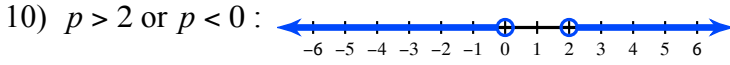
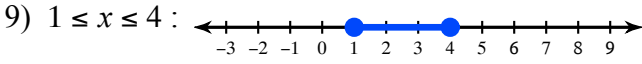
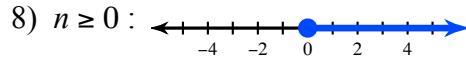
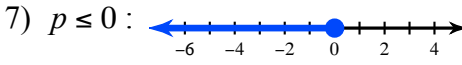
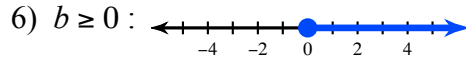
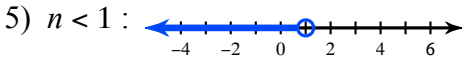
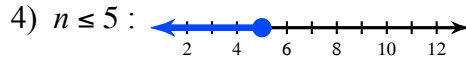
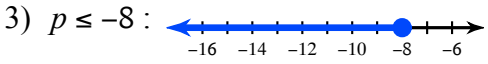
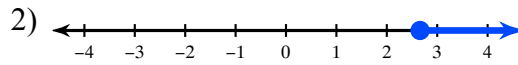
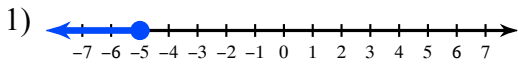
61) $\frac{|3k - 5|}{9} \leq 4$



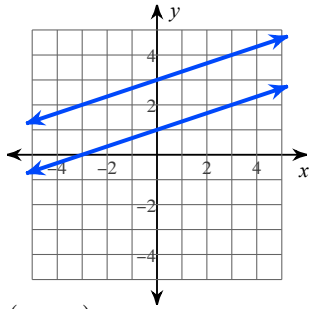
62) $9|1 - 3k| > -99$



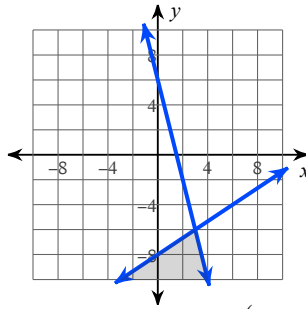
Answers to Assignment (ID: 1)



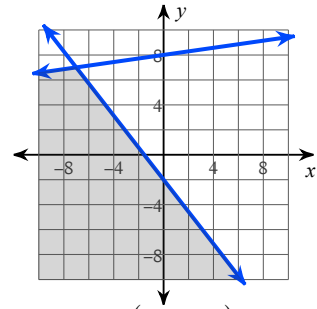
26)



27)



28)



29) $(-2, 0)$

30) $(-2, 2)$

31) $(-5, -3)$

32) $(-5, -1)$

33) $(-5, -6)$

34) $(4, -8)$

35) $(-2, 1)$

36) $(1, 0)$

37) $(3, -1)$

38) $(2, 0)$

39) $(-1, 0)$

40) $(-2, 3)$

41) $(1, -1)$

42) $(3, -1)$

43) $(-1, -1)$

44) $(-4, 7)$

45) $(1, -4)$

46) $(-3, 9)$

47) daylily: \$10, bunch of ornamental grass: \$9

48) 6 and 8

49) 58

50) 75

51) $\{1, -1\}$

52) $\{6, -6\}$

53) $\{-3, 5\}$

54) $\{13, -9\}$

55) $\{-29, 35\}$

56) $\left\{\frac{16}{3}, -8\right\}$

57) $n \geq 3$ or $n \leq -7$:

58) $-5 < n < 5$:

59) $-6 \leq x \leq 10$:

60) $-\frac{22}{7} < x < 4$:

61) $-\frac{31}{3} \leq k \leq \frac{41}{3}$:

62) $\{\text{All real numbers.}\}$: