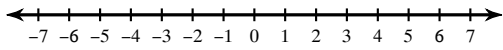


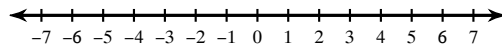
Midterm Review 2018 - Unit 3

Draw a graph for each inequality.

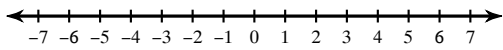
1)  $r \leq 6$



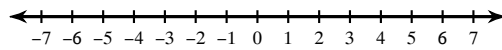
2)  $-2 < x$



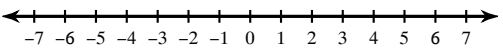
3)  $b \leq -5$



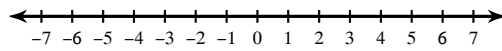
4)  $a > 3$



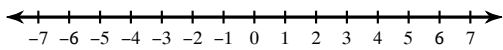
5)  $1 \leq m$



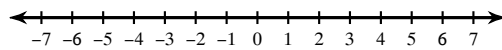
6)  $n \geq -2$



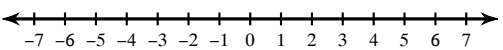
7)  $k \leq -6$



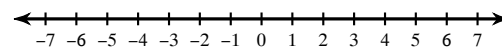
8)  $-6 < x$



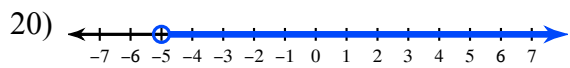
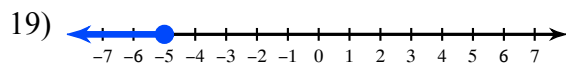
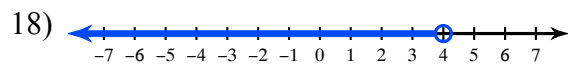
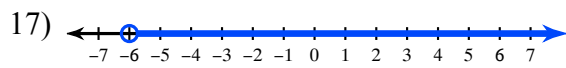
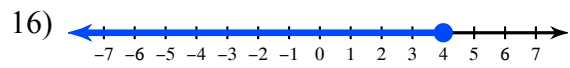
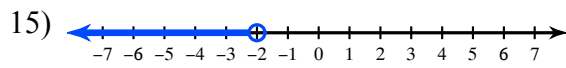
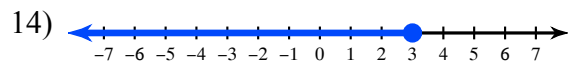
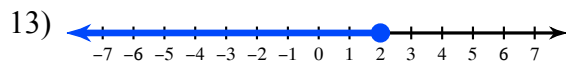
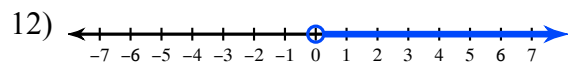
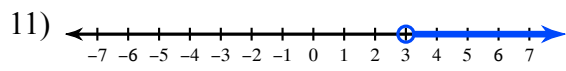
9)  $-3 < x$



10)  $1 > b$



Write an inequality for each graph.



**Solve each inequality.**

21)  $-16 < -5 + m$

22)  $p - 11 > -2$

23)  $r + 17 > 18$

24)  $-25 > x - 7$

25)  $-15n \leq -30$

26)  $-18 > 6x$

27)  $\frac{n}{14} > -17$

28)  $-50 < -10r$

29)  $\frac{n}{4} - 10 \leq -6$

30)  $-9x + 5 \geq 122$

31)  $0 > \frac{3 + n}{4}$

32)  $1 \leq \frac{v - 9}{8}$

$$33) 32 \leq -4(5 + k)$$

$$34) 132 \geq -6(n - 3)$$

$$35) 1 < \frac{2 + v}{4}$$

$$36) \frac{r}{4} - 6 \geq -4$$

**Simplify each expression.**

$$37) 9x + 10x$$

$$38) 4x - 9x$$

$$39) 1 + 6n - 3n$$

$$40) 9k - 5 + 8k + 10$$

$$41) 1 + 7x + x - 10$$

$$42) a - 3 + 7a + 5$$

$$43) 10(1 + 5k) + 6k$$

$$44) 9(5 - 2n) - 6$$

$$45) 8(1 - 4m) - 9m$$

$$46) -5 + 4(1 + n)$$

$$47) -7(n - 1) - 4n$$

$$48) -9(9x + 4) - 4$$

**Solve each equation.**

$$49) 5 + 3x - 7 = 10$$

$$50) -6r + 6 + 2r = -22$$

$$51) 6 - 5x - 5 = -14$$

$$52) 1 + 6r - 7r = -6$$

$$53) -84 = 3(7 - 5x)$$

$$54) -6(x - 7) = 84$$

$$55) -6m + 8m = 1 - 7m - 1$$

$$56) 3 + n = 12 - 8n$$

$$57) 1 + 5m = 7m - 5$$

$$58) -2 - 3n = 5n - 2$$

$$59) 3 + 4x = -4 + 5x$$

$$60) 2 + 8x - 8x = -3 - x$$

**Solve each inequality.**

$$61) 8 < -6k + 5k$$

$$62) -13 \geq -7n - 6n$$

$$63) 7x + 3x < 10$$

$$64) -16 < -5v - 3v$$

$$65) m - 2 \geq 16 - 8m$$

$$66) -16 - 6n < 1 - 8n - 7$$

$$67) -12 - 6x + 5x > x - 8x$$

$$68) 5 + 8n < 6n + 3n + 8$$