

## Equations, Inequalities and Compound Inequalities

Solve each equation.

1)  $35 = 4v - 1$

2)  $3 = 4 + \frac{r}{4}$

3)  $\frac{m-4}{2} = 5$

4)  $-6(3+x) = -48$

5)  $19 + k = 5(6k - 2)$

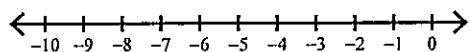
6)  $-10 - 6x = 5(-2 + 3x)$

7)  $29 + n = -4 - 4(n - 2)$

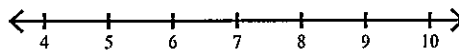
8)  $-5(1 - 2n) = 11 + 6n$

Solve each inequality and graph its solution.

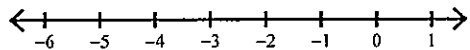
9)  $5b + 3 < -22$



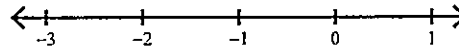
10)  $-4 - 2x > -18$



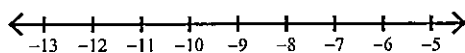
11)  $3 > -3n - 3$



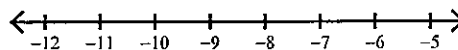
12)  $4(n - 4) \leq -20$



13)  $4 + 3r \leq -26$

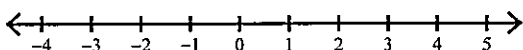


14)  $0 < \frac{x}{8} + 1$

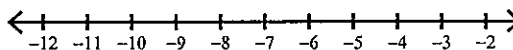


**Solve each compound inequality and graph its solution.**

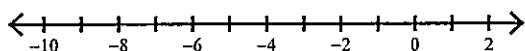
15)  $-13 < 10n + 7 \leq 27$



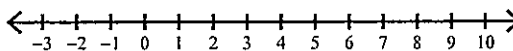
16)  $-24 < 2p - 4 \leq -12$



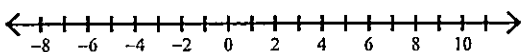
17)  $61 \geq -8k - 3 > 5$



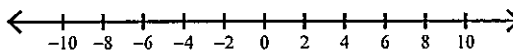
18)  $-6 \leq -a + 1 < 1$



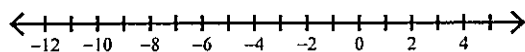
19)  $2x - 9 < -17$  or  $-4x - 3 < -35$



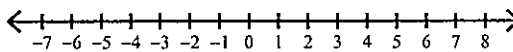
20)  $-4k + 5 > 29$  or  $6 - 5k \leq -24$



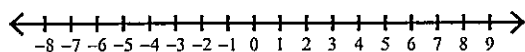
21)  $-108 \leq 10p - 8 \leq 12$



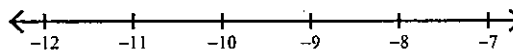
22)  $10 + 9x < -8$  or  $-5 - x \leq -8$



23)  $63 > 8n + 7 > -41$



24)  $-15 \geq -7 + m > -17$



Solve each equation.

1)  $35 = 4v - 1$

$$9 = v$$

2)  $3 = 4 + \frac{r}{4}$

$$-4 = r$$

3)  $\frac{m-4}{2} = 5$

$$m = 14$$

4)  $-6(3+x) = -48$

$$x = 5$$

5)  $19 + k = 5(6k - 2)$

$$1 = k$$

6)  $-10 - 6x = 5(-2 + 3x)$

$$0 = x$$

7)  $29 + n = -4 - 4(n - 2)$

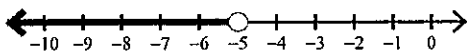
$$-5 = n$$

8)  $-5(1 - 2n) = 11 + 6n$

$$n = 4$$

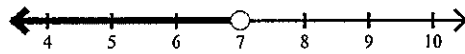
Solve each inequality and graph its solution.

9)  $5b + 3 < -22$



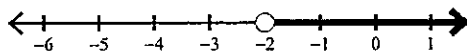
$$b < -5$$

10)  $-4 - 2x > -18$



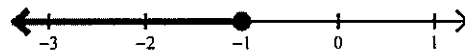
$$x < 7$$

11)  $3 > -3n - 3$



$$n > -2$$

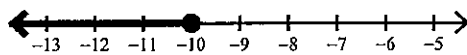
12)  $4(n - 4) \leq -20$



$$n \leq -1$$

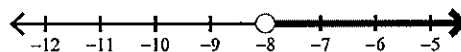
*You must  
show your  
work to  
earn credit  
on this  
assignment.*

13)  $4 + 3r \leq -26$



$r \leq -10$

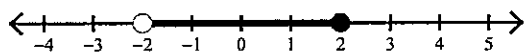
14)  $0 < \frac{x}{8} + 1$



$x > -8$

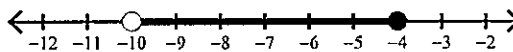
Solve each compound inequality and graph its solution.

15)  $-13 < 10n + 7 \leq 27$



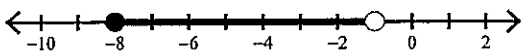
$-2 < n \leq 2$

16)  $-24 < 2p - 4 \leq -12$



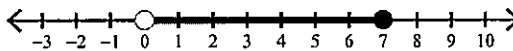
$-10 < p \leq -4$

17)  $61 \geq -8k - 3 > 5$



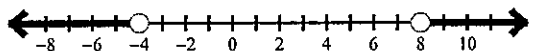
$-8 \leq k < -2$

18)  $-6 \leq -a + 1 < 1$



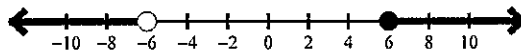
$7 \geq a > 0$

19)  $2x - 9 < -17$  or  $-4x - 3 < -35$



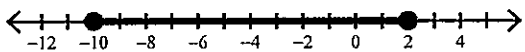
$x < -4$  OR  $x > 8$

20)  $-4k + 5 > 29$  or  $6 - 5k \leq -24$



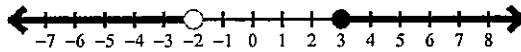
$k < -6$  OR  $k \geq 6$

21)  $-108 \leq 10p - 8 \leq 12$



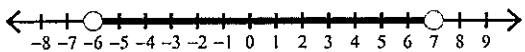
$-10 \leq p \leq 2$

22)  $10 + 9x < -8$  or  $-5 - x \leq -8$



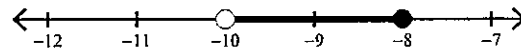
$x < -2$  OR  $x \geq 3$

23)  $63 > 8n + 7 > -41$



$7 > n > -6$

24)  $-15 \geq -7 + m > -17$



$-8 \geq m > -10$