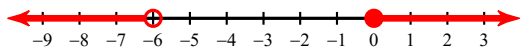


## Unit 1.9 Solving Compound Inequalities

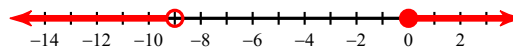
Solve each compound inequality and graph its solution. Give the interval notation.

1)  $\frac{v}{6} \geq 0$  or  $v + 6 < 0$



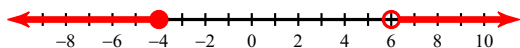
$v \geq 0$  or  $v < -6$

2)  $x + 3 < -6$  or  $\frac{x}{10} \geq 0$



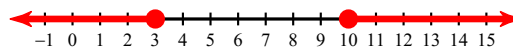
$x < -9$  or  $x \geq 0$

3)  $2r - 1 \leq -9$  or  $9 - 7r < -33$



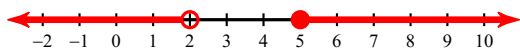
$r \leq -4$  or  $r > 6$

4)  $-8n + 4 \geq -20$  or  $n + 9 \geq 19$



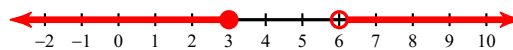
$n \leq 3$  or  $n > 10$

5)  $2a + 7 \leq 2 + 3a$  or  $-2a - 3 < -6a + 5$



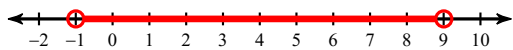
$a \geq 5$  or  $a < 2$

6)  $p + 6 \geq 6p - 9$  or  $4 - 10p < -9p - 2$



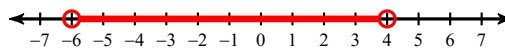
$p \leq 3$  or  $p > 6$

7)  $-10 < m - 9 < 0$



$-1 < m < 9$

8)  $-12 < -3v < 18$



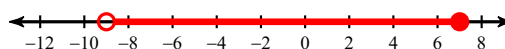
$-6 < v < 4$

9)  $-4 \leq 3 - x \leq 3$



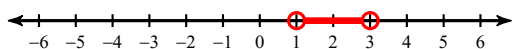
$0 \leq x \leq 7$

10)  $-23 < 3v + 4 \leq 25$



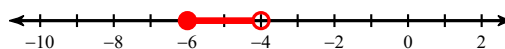
$-9 < v \leq 7$

11)  $4v - 1 > 1 + 2v$  and  $4 - 8v > -4v - 8$



$1 < v < 3$

12)  $9n + 5 \geq 8n - 1$  and  $2n - 6 > 3n - 2$



$-6 \leq n < -4$