

## 1.2 Practice - Solving Inequalities

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**Solve each equation.**

$$1) -\frac{28}{9} + \frac{1}{2}n = \frac{4}{3}n - 2$$

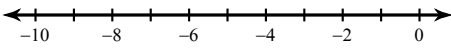
$$2) a - \frac{13}{6} = -\frac{89}{12} - 3\frac{1}{5}a$$

$$3) \frac{8}{9} - \frac{7}{4}p = -\frac{2}{3}p - \frac{7}{4}p$$

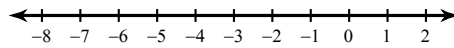
$$4) r - \frac{5}{3} = -\frac{25}{12} + \frac{3}{2}r + \frac{1}{3}r$$

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

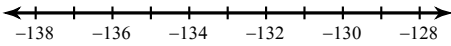
$$5) 122 \leq 8 + 2(1 - 7n)$$



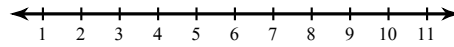
$$6) 6(p - 1) - 4(p - 8) > 26$$



$$7) -12 \geq \frac{m}{11}$$

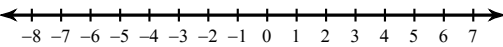


$$8) 4(6r - 1) > 92$$

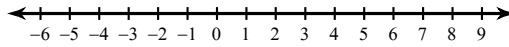


**Solve each compound inequality and graph its solution.**

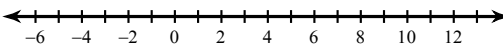
$$9) -21 < 3x \leq 18$$



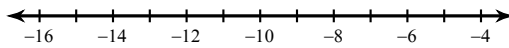
$$10) -22 \leq 2 - 3m \leq 14$$



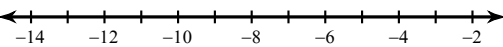
$$11) -6n \geq 18 \text{ or } n + 10 > 18$$



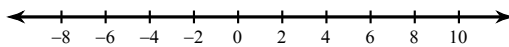
$$12) -8v - 5 \geq 75 \text{ or } 5v + 9 \geq -31$$



$$13) -17 \leq 3 + 2x < -13$$



$$14) 8 + 4x < -16 \text{ or } 2 - 3x < -22$$



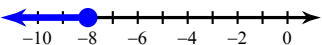
## Answers to 1.2 Practice - Solving Inequalities

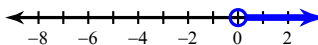
1)  $\left\{-\frac{4}{3}\right\}$

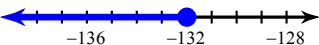
2)  $\left\{-\frac{5}{4}\right\}$

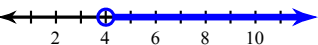
3)  $\left\{-\frac{4}{3}\right\}$

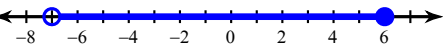
4)  $\left\{\frac{1}{2}\right\}$

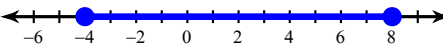
5)  $n \leq -8$ : 

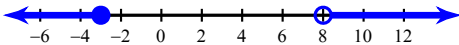
6)  $p > 0$ : 

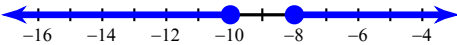
7)  $m \leq -132$ : 

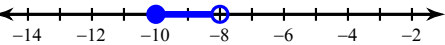
8)  $r > 4$ : 

9)  $-7 < x \leq 6$ : 

10)  $-4 \leq m \leq 8$ : 

11)  $n \leq -3$  or  $n > 8$ : 

12)  $v \leq -10$  or  $v \geq -8$ : 

13)  $-10 \leq x < -8$ : 

14)  $x < -6$  or  $x > 8$ : 