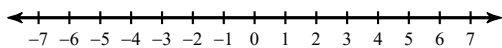


## Solving Inequalities - Class Examples

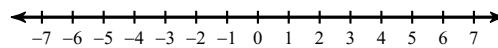
Date \_\_\_\_\_ Period \_\_\_\_\_

**Draw a graph for each inequality.**

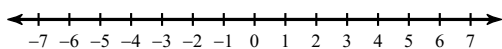
1)  $a > 1$



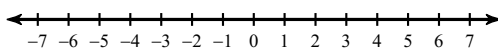
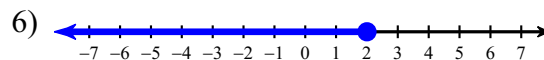
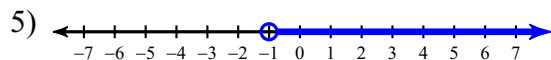
2)  $p \leq 3$



3)  $-5 < x$



4)  $-3 < p$

**Write an inequality for each graph.**

**Write an inequality to model each situation.**

7) The restaurant must serve at least 42 people to make a profit.

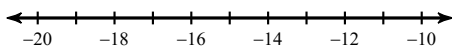
8) It must be cooler than  $95^{\circ}$  for my dog to go outside.

9) This classroom can hold up to 36 students.

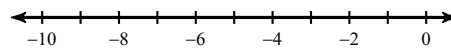
10) A law clerk has earned more than \$20,000 since being hired.

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

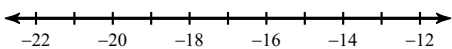
11)  $3 > a + 20$



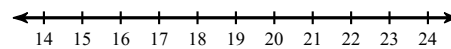
12)  $-18 \leq x - 11$



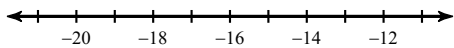
13)  $14n > -210$



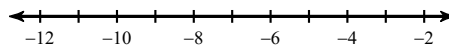
14)  $9n \leq 144$



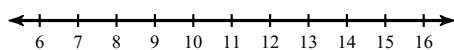
$$15) -20v \leq 280$$



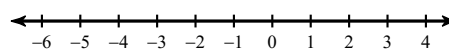
$$16) -18v \leq 108$$



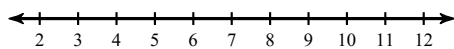
$$17) \frac{k-4}{6} \leq 1$$



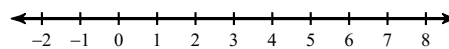
$$18) \frac{p}{2} - 4 < -4$$



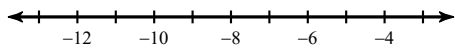
$$19) 4x + 5 \leq 21$$



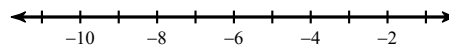
$$20) -5n - 4 \geq -29$$



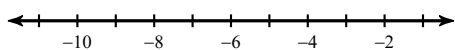
$$21) -15 < 5(4 + p)$$



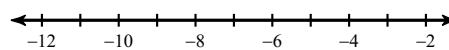
$$22) \frac{n}{4} + 5 \leq 4$$



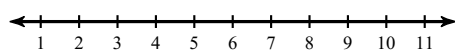
$$23) 5(n - 3) > -27 + 3n$$



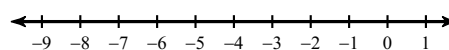
$$24) 26 - 4x \leq -4(6 + 4x) + 2$$



$$25) -(1 + 3x) > -28 + 6x$$



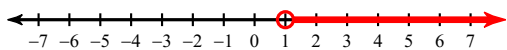
$$26) 26 - 3m < -4 + 3(5 - 2m)$$



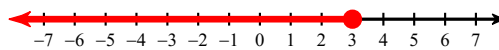
# Solving Inequalities - Class Examples

**Draw a graph for each inequality.**

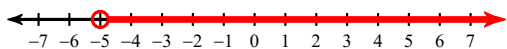
1)  $a > 1$



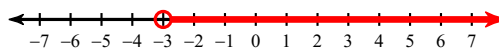
2)  $p \leq 3$



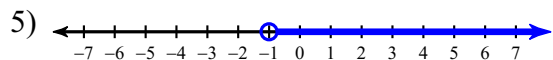
3)  $-5 < x$



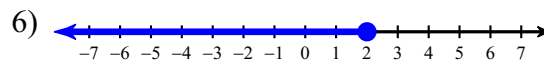
4)  $-3 < p$



**Write an inequality for each graph.**



$k > -1$



$x \leq 2$

**Write an inequality to model each situation.**

7) The restaurant must serve at least 42 people to make a profit.

$$p \geq 42$$

8) It must be cooler than  $95^\circ$  for my dog to go outside.

$$t < 95$$

9) This classroom can hold up to 36 students.

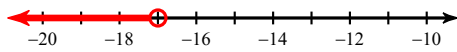
$$s \leq 36$$

10) A law clerk has earned more than \$20,000 since being hired.

$$m > 20000$$

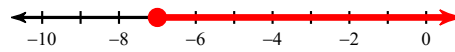
**Solve each inequality and graph its solution.**

11)  $3 > a + 20$



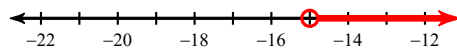
$$a < -17$$

12)  $-18 \leq x - 11$



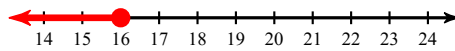
$$x \geq -7$$

13)  $14n > -210$



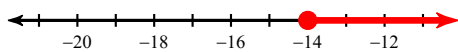
$$n > -15$$

14)  $9n \leq 144$



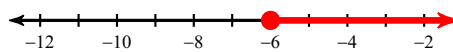
$$n \leq 16$$

$$15) -20v \leq 280$$



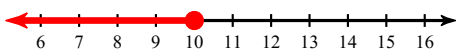
$$v \geq -14$$

$$16) -18v \leq 108$$



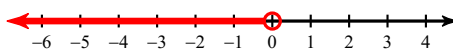
$$v \geq -6$$

$$17) \frac{k-4}{6} \leq 1$$



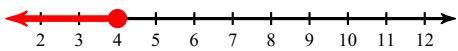
$$k \leq 10$$

$$18) \frac{p}{2} - 4 < -4$$



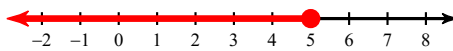
$$p < 0$$

$$19) 4x + 5 \leq 21$$



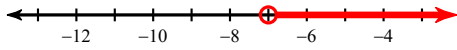
$$x \leq 4$$

$$20) -5n - 4 \geq -29$$



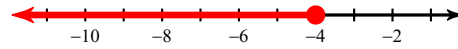
$$n \leq 5$$

$$21) -15 < 5(4 + p)$$



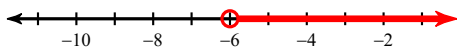
$$p > -7$$

$$22) \frac{n}{4} + 5 \leq 4$$



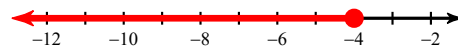
$$n \leq -4$$

$$23) 5(n - 3) > -27 + 3n$$



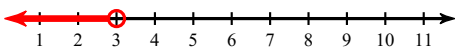
$$n > -6$$

$$24) 26 - 4x \leq -4(6 + 4x) + 2$$



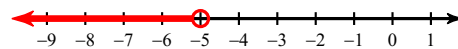
$$x \leq -4$$

$$25) -(1 + 3x) > -28 + 6x$$



$$x < 3$$

$$26) 26 - 3m < -4 + 3(5 - 2m)$$



$$m < -5$$