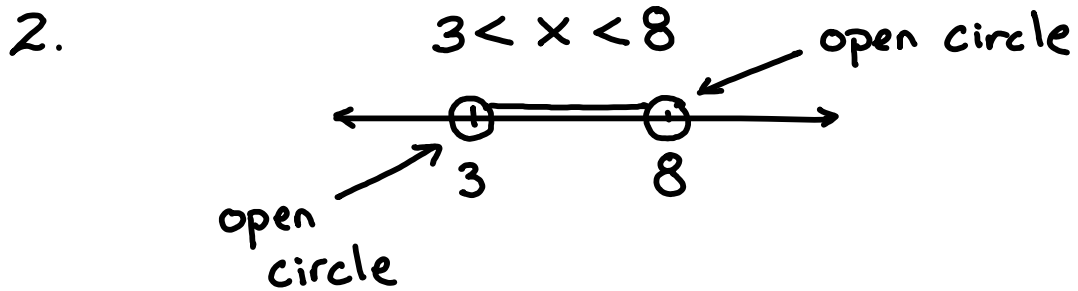


1. True

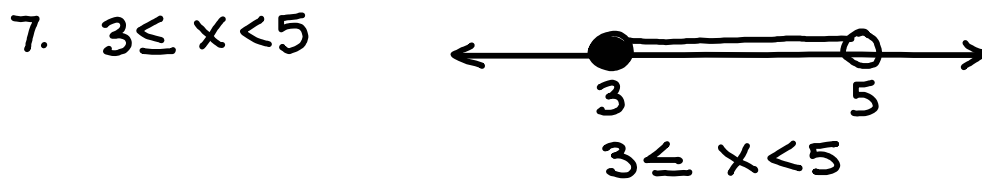


3. The sign reverses

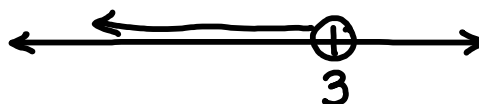
4. $x \geq 25,000$

5. $60 < x < 70$

6. No. $-9 < -10$ is false

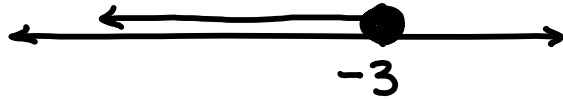


8. $4x < 12$
 $x < 3$



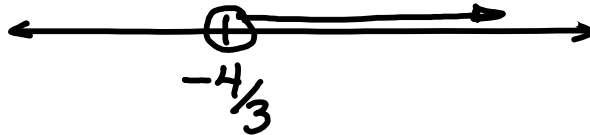
9.

$$\begin{aligned} -3x &\geq 9 \\ x &\leq -3 \end{aligned}$$



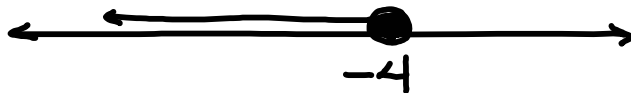
10.

$$\begin{aligned} -x + 5 &> -10x - 7 \\ 9x &> -12 \\ x &> -\frac{12}{9} \\ x &> -\frac{4}{3} \end{aligned}$$



11.

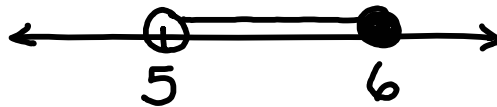
$$\begin{aligned} 3(x-1) &\leq -15 \\ 3x - 3 &\leq -15 \\ 3x &\leq -12 \\ x &\leq -4 \end{aligned}$$



12.

$$10 < 2x \leq 12$$

$$5 < x \leq 6$$



13.

$$1 \leq 2(x+3) \leq x-4$$

$$1 \leq 2x+6 \leq x-4$$

$$1 \leq x+6 \leq -4$$

$$-5 \leq x \leq -10$$



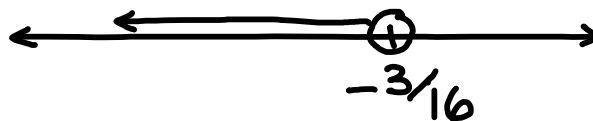
14.

$$-5(3x+1) > (x-2)$$

$$-15x - 5 > x - 2$$

$$-16x > 3$$

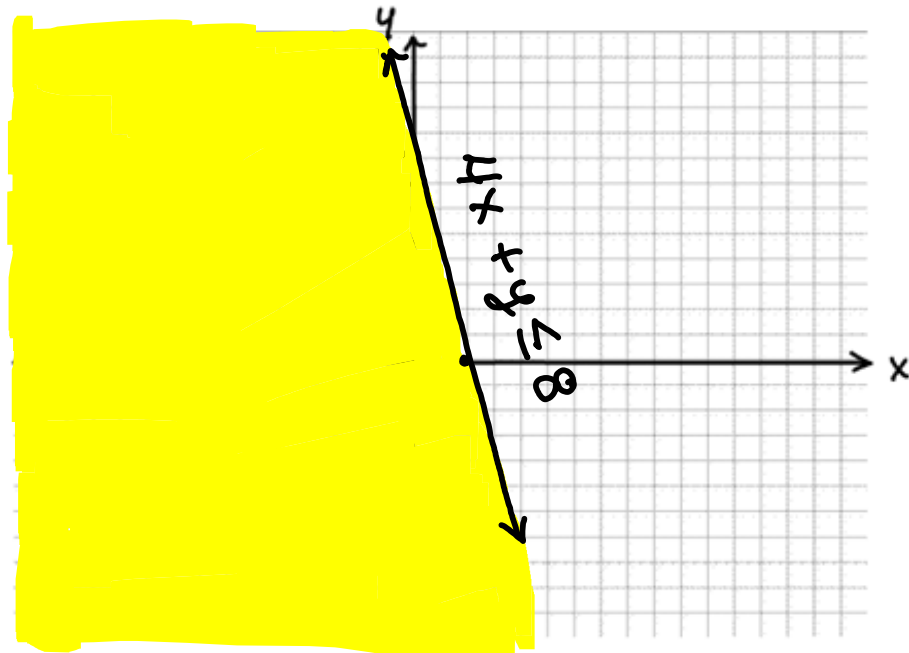
$$x < -\frac{3}{16}$$



15. $(-1, 5)$
is not a
solution

$$\begin{aligned} 2x + 3y &< 10 && (-1, 5) \\ 2(-1) + 3(5) &< 10 \\ -2 + 15 &< 10 \\ 13 &< 10 && \text{False} \end{aligned}$$

16.



17.

