

Solving Inequalities - Notes

Solve each inequality. Show all required work. Make sure your variable is on the left in your final answer.

$$1) 5n - 1 \geq -101$$

• Did I just

$$5n \geq -100$$

$$\frac{5n}{5} \geq \frac{-100}{5}$$

$$n \geq -20$$

$$2) -3 - 2x \geq 15$$

$$-2x \geq 18$$

$$\frac{-2x}{-2} \geq \frac{18}{-2}$$

$$x \leq -9$$

$$3) -3x - 6 > 42$$

$$-3x > 48$$

$$\frac{-3x}{-3} > \frac{48}{-3}$$

$$x < -16$$

$$4) 5b - 2 < 83$$

$$5b < 85$$

$$\frac{5b}{5} < \frac{85}{5}$$

$$b < 17$$

$$5) 8(n+1) > 112$$

$$8n + 8 > 112$$

$$8n > 104$$

$$\frac{8n}{8} > \frac{104}{8}$$

$$n > 13$$

$$6) -3(3+v) \geq -48$$

$$-9 - 3v \geq -48$$

$$-3v \geq -39$$

$$\frac{-3v}{-3} \geq \frac{-39}{-3}$$

$$v \leq 13$$