

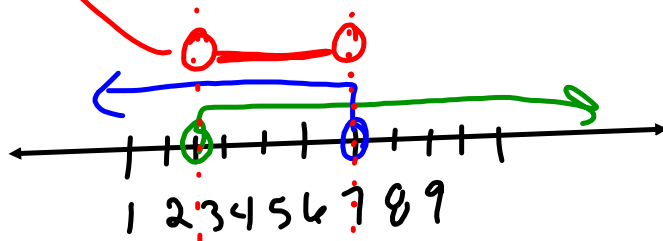
Do NOT move the desk!!
Turn your phone OFF!!
Put your phone up!!
Sit down!!
Be quiet!!
Prepare to work!!
Keep your hands to yourself!!

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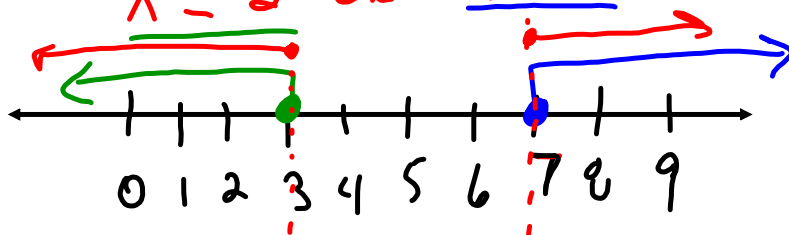
Solving Compound Inequalities

* Compound Inequalities

$$2 < x < 7 \Rightarrow \text{And}$$

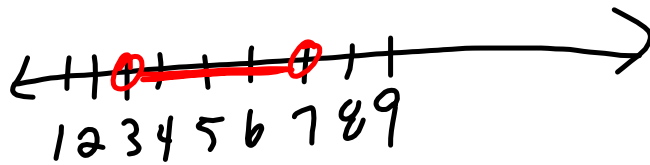


$$x \leq 3 \text{ OR } x \geq 7 \Rightarrow \text{OR}$$

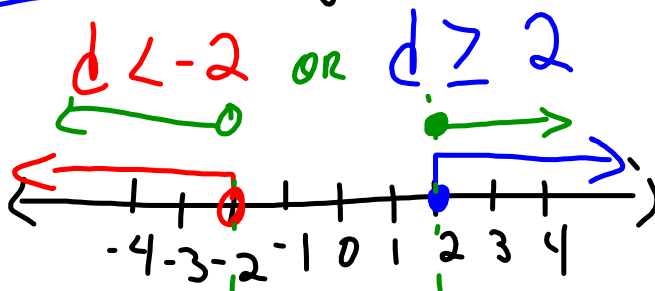


1) A # u is less than 7 and greater than 3
 $u < 7$ $u > 3$

$$3 < u < 7$$



2) A # d is less than -2 or greater than or equal to 2.
 $d < -2$ or $d \geq 2$



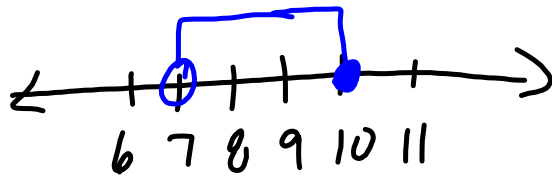
$$-2 > d \geq 2$$

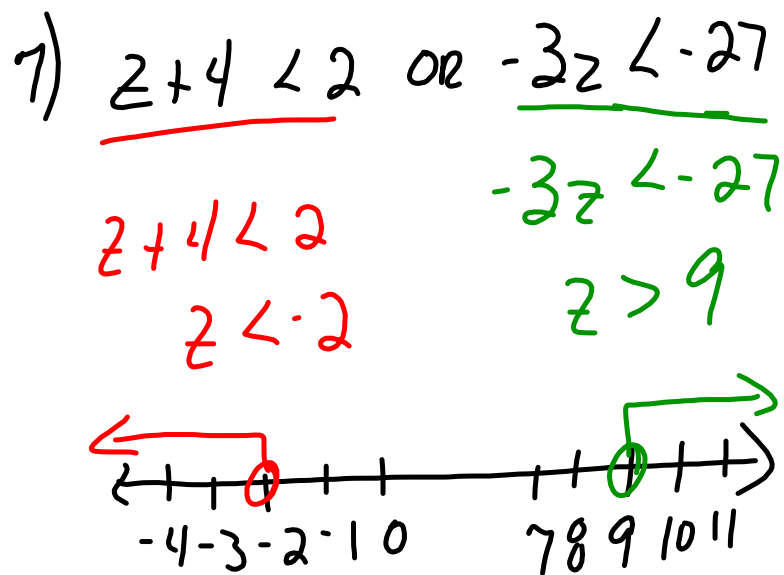
$$2 \leq d < -2$$

$$5) \underline{4 < x - 3} \leq 7$$

$$4 < x - 3 \quad x - 3 \leq 7$$

$$7 < x \quad x \leq 10$$





$$15) \quad \underline{5 - k} < \underline{-x + k} < 6.3$$

$$\{x \mid -2.8 < x \leq 2\}$$

$$\begin{array}{r} 5 - k \leq -x + k \\ + k \qquad + k \\ \hline \end{array}$$

$$5 \leq -x + 2k$$

$$5 + x \leq 2k$$

$$\frac{5 + x}{2} \leq \underline{k}$$

$$-x + k < 6.3$$

$$\underline{k} < 6.3 + x$$

$$\frac{5 + x}{2} < 6.3 + x$$

$$5 + x < 12.6 + 2x$$

$$5 < 12.6 + x$$

$$-7.6 < x$$

