

Algebra: Please clear your desk except for...

1. Assignment #30
2. SNB - Solve and graph the solution.

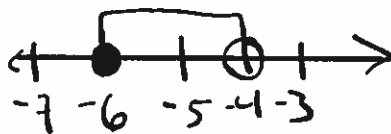


1. $16 < -3c + 4 \leq 22$

$$12 < -3c \leq 18 \quad *$$

$$-4 > c \geq -6$$

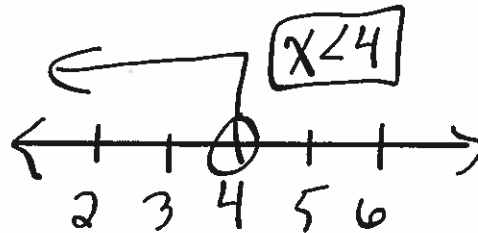
$$\boxed{-6 \leq c < -4}$$



2. $2 - 3x \geq 11$ or $2x + 8 < 16$

$$-3x \geq 9 \quad * \quad \text{or} \quad 2x < 8$$

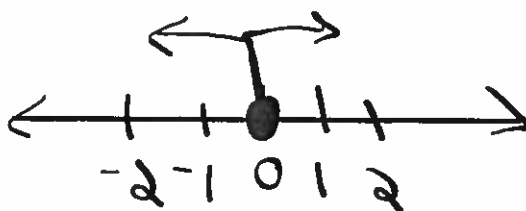
$$x \leq -3 \quad \text{or} \quad x < 4$$



Compound Inequality Review Worksheet

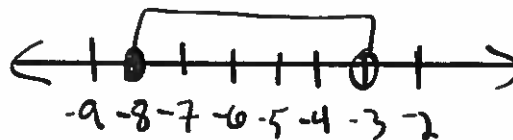
1. $x < -3$ or $x \geq -8$

$$\boxed{x = \{ \text{All real } \# \}} \}$$



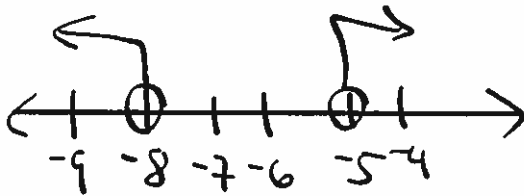
2. $x < -3$ and $x \geq -8$

$$\boxed{-8 \leq x < -3}$$



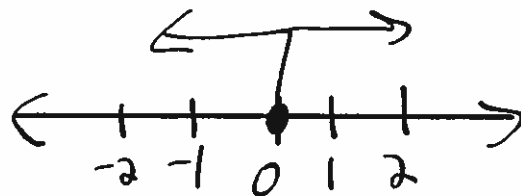
3. $y < -8$ or $-5 < y$

$$y < -8 \text{ or } y > -5$$



4. $m \geq 6$ or $m \leq 10$

$$m = \{ \text{All real \#s} \}$$



5. $3\frac{1}{2} < -w$ and $w > -3$

$$-3\frac{1}{2} > w$$

$$w < -3\frac{1}{2} \text{ and } w > -3$$

No Real Solution

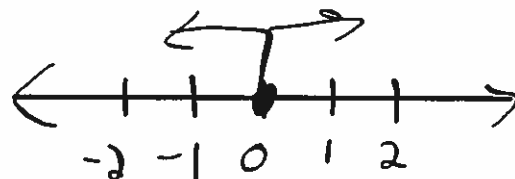


6. $-2x > 6$ or $-x - 5 < 10$

$$x < -3 \text{ or } -x < 15$$

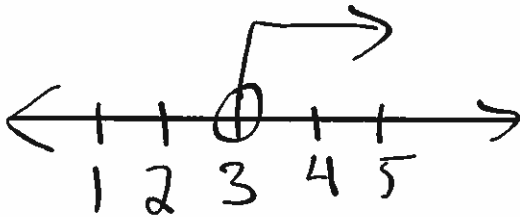
$$x < -3 \text{ or } x > -15$$

$$x = \{ \text{All real \#s} \}$$



7. $3 < y$ and $y > -2$
 $y > 3$ and $y > -2$

$$y > 3$$



8. $\frac{1}{2}m \leq -5$ and $2m > -20$
 $m \leq -10$ and $m > -10$

No Real Solution



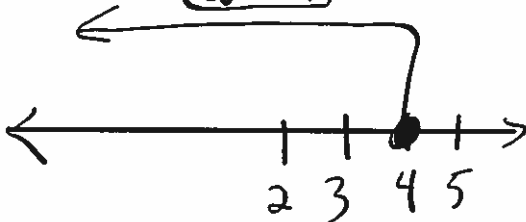
9. $6 < 3 - w$ or $-3w \geq -12$

$$3 < -w$$

$$-3 > w$$

$$w < -3 \text{ or } w \leq 4$$

$$w \leq 4$$

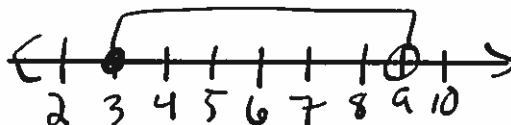


10. $-12 < -2x + 6 \leq 0$

$$-18 < -2x \leq -6$$

$$9 > x \geq 3$$

$$3 \leq x < 9$$



11. $2(3-x) \geq 6x+8-8x$

$6+(-2x) \geq -2x+8$

$6 \geq 8$ Always
False

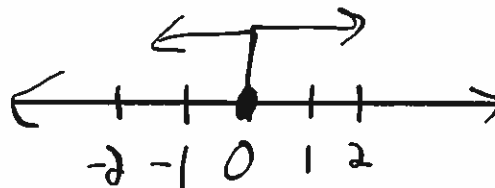
No Real Solution

12. $-\frac{1}{2}(12y-8) < 3(5-2y)$

$-6y+4 < 15+(-6y)$

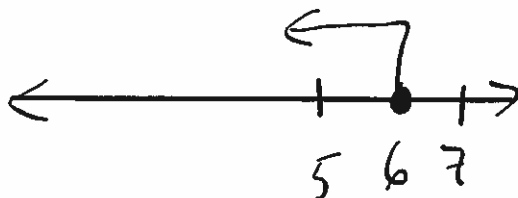
$4 < 15$ Always
True

$y = \{ \text{All real } \#s \}$



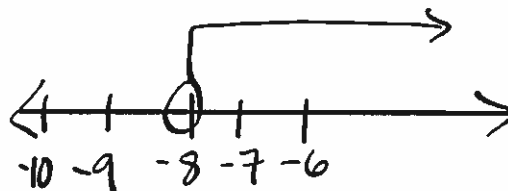
13. $m \leq 6$ or $m < -9$

$m \leq 6$



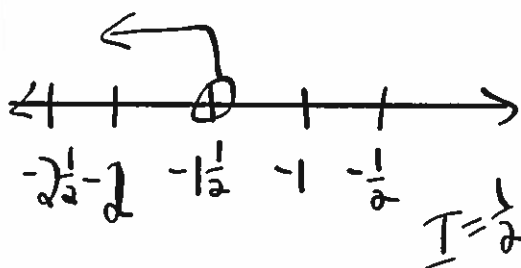
14. $w > -3$ or $w > -8$

$w > -8$

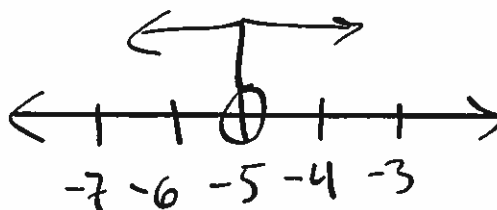


15. $x \leq 4\frac{1}{2}$ and $x < -1\frac{1}{2}$

$$x < -1\frac{1}{2}$$

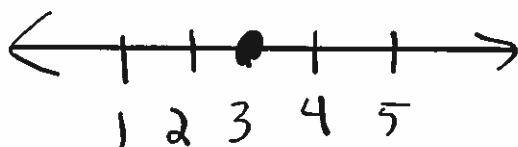


16. $y < -5$ or $y > -5$



17. $m \geq 3$ and $m \leq 3$

$$m = 3$$



18. $w < 0$ or $w \geq 0$

$$w = \{ \text{All Real \#s} \}$$

