

DIRECTIONS: Solve the following compound inequalities and graph the solution sets.

1. $-5 < a + 1 \leq 1$

$$-6 < a \leq 0$$



2. $-9y \leq 18$ or $y + 6 \leq 0$

$$y \leq -6 \text{ or } y \geq -2$$



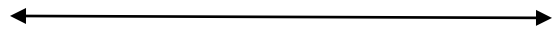
3. $8 < 5 - 3x \leq 14$

$$-3 \leq x < -1$$



4. $2 \geq \frac{1}{4}d + 1 \geq -1$

$$-8 \leq d \leq 4$$



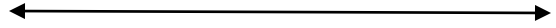
5. $3y - 4 \leq -1$ or $y - 1 \geq 0$

All real numbers (At least one of them is true everywhere, including at 1)



6. $5n - 1 > 0$ and $4n + 2 < 0$

No solution (there is nowhere that **both** parts are true)



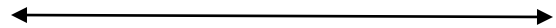
7. $3y + 5 \geq 2y + 1 > y - 1$

$y > -2$ (You need to split the original sANDwich conjunction into two parts)



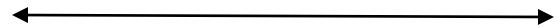
8. $-3 - 5a > 7 > 2 + 5a$

$a < -2$ (You need to split the original sANDwich conjunction into two parts)



9. $7p - 1 > p + 11$ or $-11p > -33$

All real numbers



10. $-3 \leq -7 - 4x \leq 3$

$-\frac{5}{2} \leq x \leq -1$

