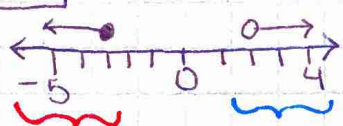


Combo Inequalities

writing inequalities

ex1 "OR"



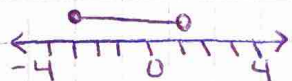
$x \leq -3$ or $x > 2$

* use 2 inequalities

ex3



ex2 "AND"



$-3 \leq x < 1$

* use 1 long inequality

solving w/ OR

• the final graph needs to have solutions for either equation

ex1

$5x + 7 < 13$ OR $-4x + 3 > 11$

$+7 +7$

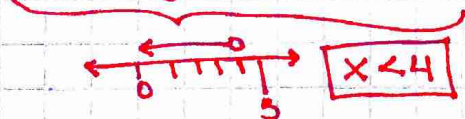
$-3 -3$

$\frac{5x}{5} < \frac{20}{5}$

$\frac{-4x}{-4} > \frac{8}{-4}$

$x < 4$

$x < -2$



$x < 4$

Steps

1. solve each eq.
2. see which one is the larger set

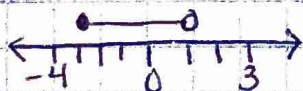
solving w/ AND

ex1

$-12 \leq 7x + 9 < 16$

$\frac{-21}{7} \leq \frac{7x}{7} < \frac{7}{7}$

$-3 \leq x < 1$



solving the long inequality

more examples

1. $-3x + 2 > -7$ or $2(x - 2) \geq 6$
2. $-2(x + 1) < 4$ and $4x + 1 \leq -3$