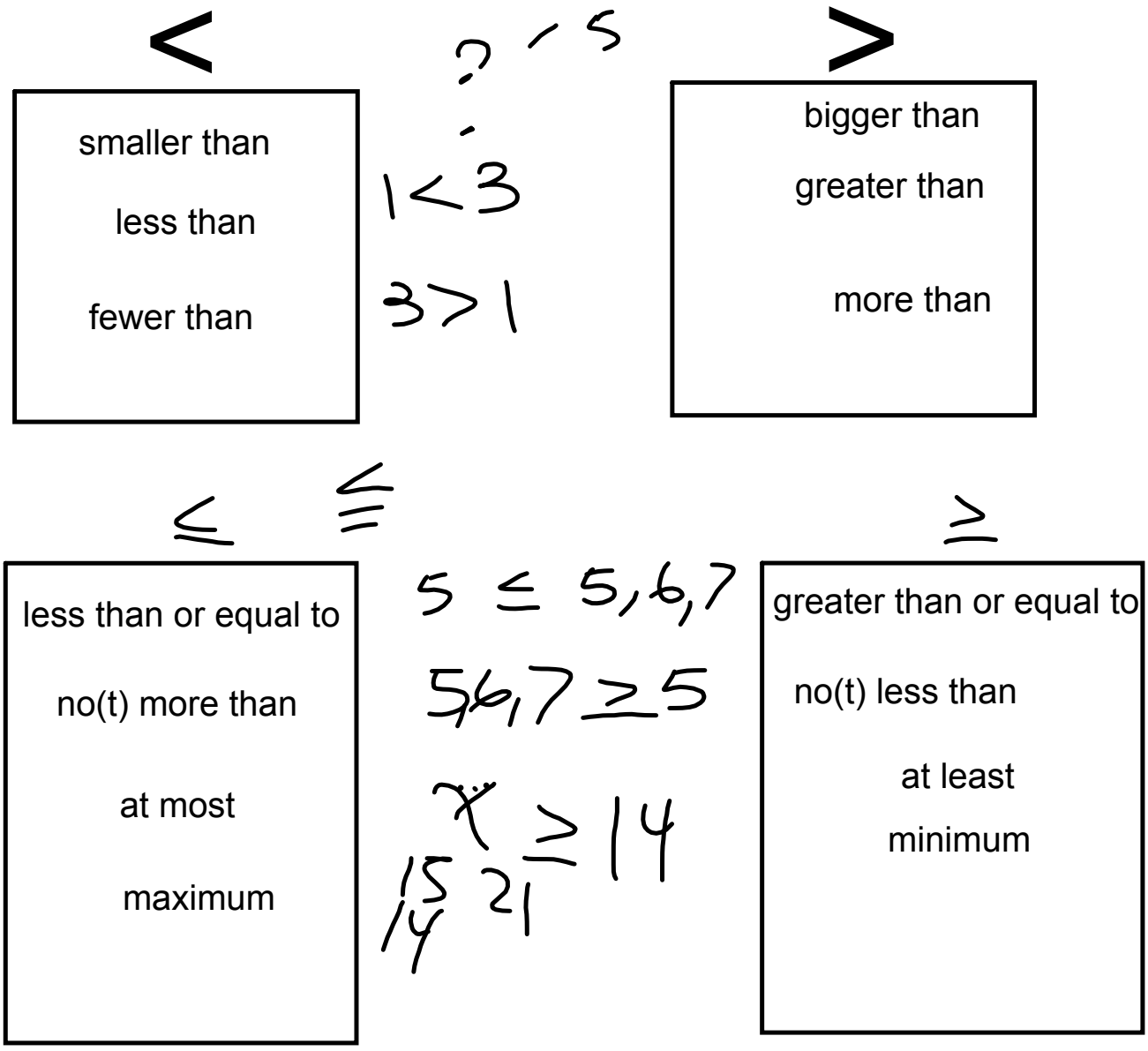
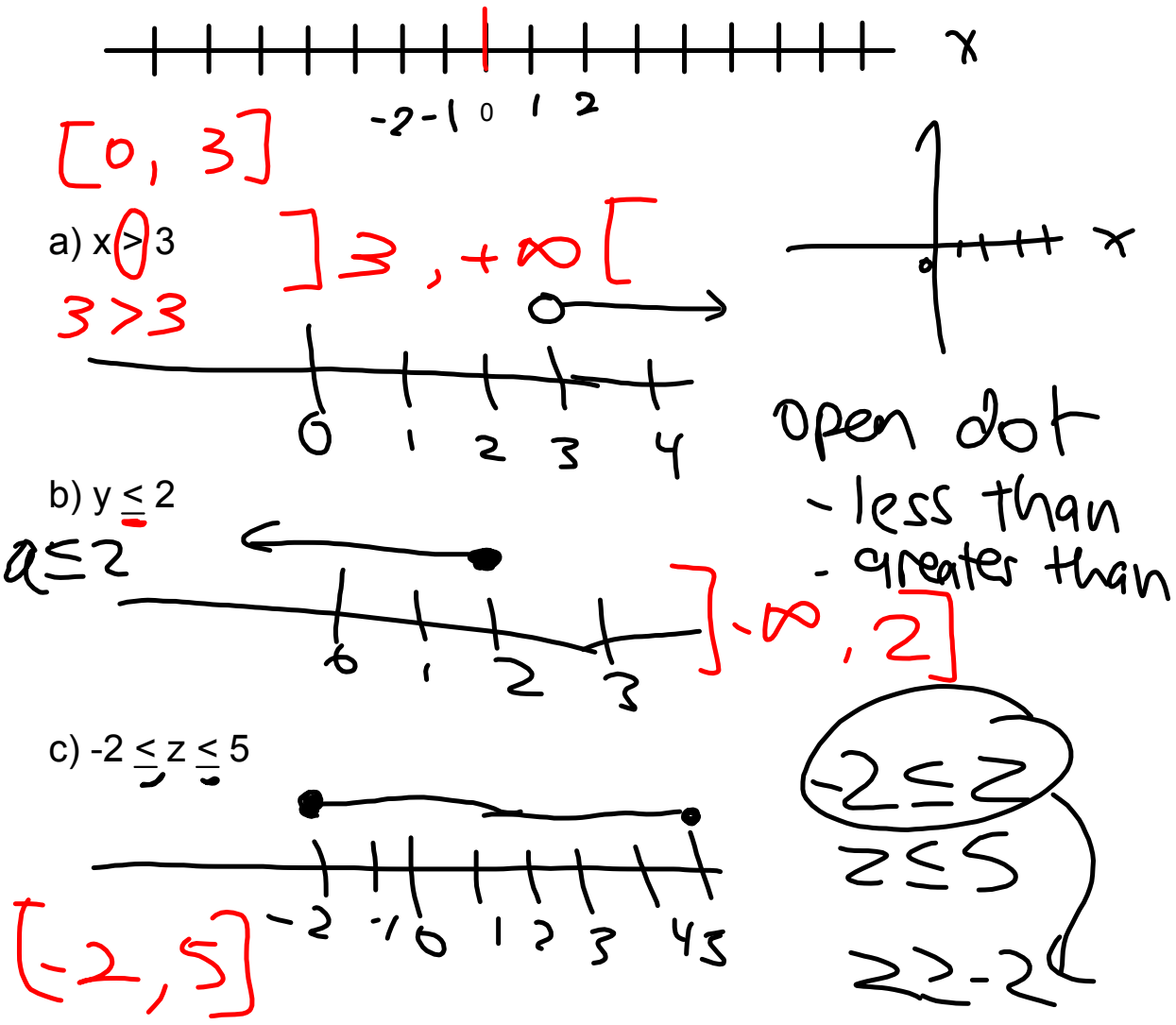
Inequalities



Two other ways to show: Number Lines and Intervals



Remember: with brackets, opening away means **not** including.
or infinity

Transforming Inequalities

Works the same way as with an equals sign except that:
when multiplying or dividing both sides by the same **negative** number, the inequality is "flipped"

$-2x=4$
$x=-2$

$2x=-4$
$x=-2$

e.g. $-2x < 4$

$\frac{-2x}{-2} < \frac{4}{-2}$

$x > -2$

e.g. $2x < -4$

$\frac{2x}{2} < \frac{-4}{2}$

$x < -2$

$-3y+7 \leq -3$

$-3y \leq -3-2$

$-3y \leq -5$

$\frac{-3y}{-3} \leq \frac{-5}{-3}$

$y \geq \frac{5}{3}$

$y \geq 1.67$

$-3y < -5$