

Inequalities



smaller than
less than
fewer than

2 - 5
1 < 3
3 > 1



bigger than
greater than
more than



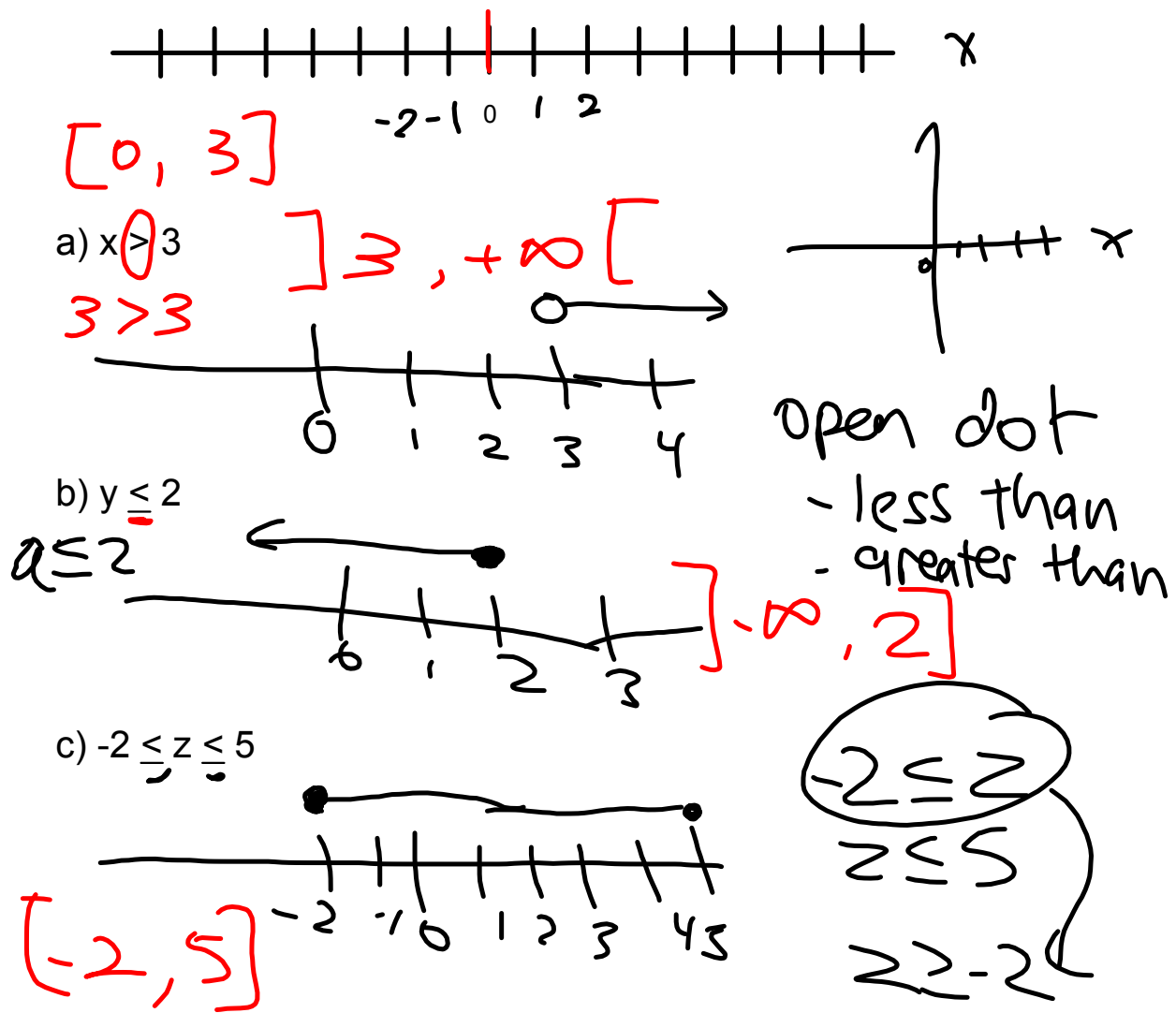
less than or equal to
no(t) more than
at most
maximum

5 ≤ 5, 6, 7
5, 6, 7 ≥ 5
x ≥ 14
15 21



greater than or equal to
no(t) less than
at least
minimum

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"

	$-2x = 4$	$2x = -4$
	$x = -2$	$x = -2$
e.g. $-2x < 4$		e.g. $2x < -4$

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

$$x > -2$$

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

$$x < -2$$

$$-3y + 2 < -3$$

$$-3y < -3 - 2$$

$$-3y < -5$$

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

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

$$y > 1.67$$