

$$1 = 4|x-2| + 2$$

$$-1 = 4|x-2|$$

$$-\frac{1}{4} = |x-2|$$

$$|x+3|=9$$

$$x+3=9 \quad \text{or} \quad x+3=-9$$

$$x=6 \quad \text{or} \quad x=-12$$

$$|5x-2|=11$$

$$5x-2=11 \quad \text{or} \quad 5x-2=-11$$

$$5x=13 \quad 5x=-9$$

$$x=\frac{13}{5} \quad x=-\frac{9}{5}$$

$$3 |x+1| - 4 = 5$$

$$\frac{3 |x+1|}{3} = \frac{9}{3}$$

$$|x+1| = 3$$

$$x+1 = 3 \text{ or } x+1 = -3$$

$$x = 2 \qquad x = -4$$

$$5|x-4| - 7 = 2$$

$$5|x-4| = 9$$

$$|x-4| = \frac{9}{5}$$

$$x-4 = \frac{9}{5}$$

$$x-4 = -\frac{9}{5}$$

$$+4 \quad +4$$

$$x = \frac{9}{5} + 4$$

$$\frac{9}{5} + \frac{20}{5}$$

$$\frac{29}{5}$$

$$-\frac{9}{5} + \frac{20}{5}$$

$$\frac{11}{5}$$

$$2|x-3|+1=2$$

$$2|x-3|=1$$

$$|x-3|=\frac{1}{2}$$

$$x-3=\frac{1}{2} \quad x-3=-\frac{1}{2}$$

$$x=3\frac{1}{2} \quad x=2\frac{1}{2}$$

$$= \frac{7}{2}$$

$$\frac{5}{2}$$

$$-\left|\frac{1}{3}x+5\right|+14=0$$

$$-\left|\frac{1}{3}x+5\right|=-14$$

$$\left|\frac{1}{3}x+5\right|=14$$

$$\frac{1}{3}x+5=14 \text{ or } \frac{1}{3}x+5=-14$$

$$\frac{1}{3}x=9$$

$$x=27$$

$$\frac{1}{3}x=-19$$

$$x=-57$$

$$|x| = 3$$

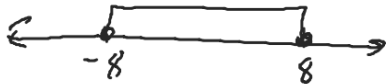
$$x = 3 \text{ or } x = -3$$

$$|x| \geq 5$$

$$x \leq -5 \text{ or } x \geq 5$$

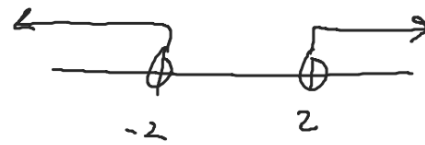
$$|x| \leq 8$$

$$-8 \leq x \leq 8$$



$$|x| > 2$$

$$x < -2 \text{ or } x > 2$$



$$(-\infty, -2) \cup (2, \infty)$$

Greater OR 

Less and 

$$|x-2| > 10$$

$$x-2 > 10 \quad \text{OR} \quad x-2 < -10$$

$$x > 12$$

$$x < -8$$

$$(-\infty, -8) \cup (12, \infty)$$

$$|x-3| < 5$$

$$-5 < x-3 < 5$$

$$+3 \quad +3 \quad +3$$

$$-2 < x < 8$$

$$(-2, 8)$$