

1. $|3x - 7| > 11$



$$3x - 7 < -11 \text{ or } 3x - 7 > 11$$

$$3x < -4 \quad 3x > 18$$

$$x < -\frac{4}{3} \text{ or } x > 6$$

2. $|2x + 3| = 5$

$$2x + 3 = 5$$

$$x = 1$$

$$2x + 3 = -5$$

$$2x = -8$$

$$x = -4 \quad x = 1$$

$$x = 1, x = -4$$

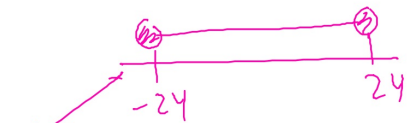
3. $|5x + 6| + 3 \leq 27$

$$|5x + 6| \leq 24$$

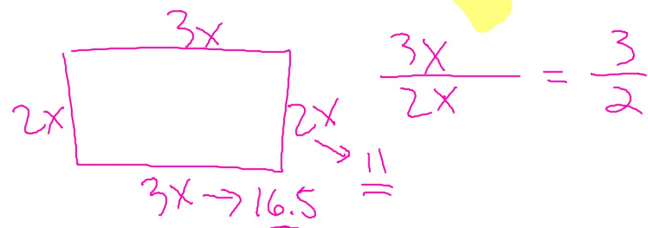
$$-24 \leq 5x + 6 \leq 24$$

$$-30 \leq 5x \leq 18$$

$$-6 \leq x \leq 3.6$$



4. The sides of a rectangle are in the ratio 3:2. If the perimeter of the rectangle is 55cm, then find the dimensions of the rectangle.



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

$$\text{Perimeter} \rightarrow 55 = 3x + 2x + 3x + 2x$$

$$16.5 \times 11$$

$$55 = 10x$$

$$5.5 = x$$