

2. Solve the inequalities  $|8x + 10| + 4 < 6$   
express your solution sets using interval notation.

$$\left[-\frac{3}{2}, -1\right]$$

$$\left(-\infty, -\frac{3}{2}\right) \cup (-1, +\infty)$$

$$\left(-\frac{3}{2}, -1\right)$$

$$\left(-\infty, -\frac{3}{2}\right] \cup [-1, +\infty)$$

**Solution**

**Intervals**

Solve:

$$|8x + 10| + 4 < 6$$

$$|8x + 10| < 2$$

$$-2 < 8x + 10 < 2$$

$$-2 - (10) < 8x < 2 - (10)$$

$$-12 < 8x < -8$$

Divide each side by 8

$$|8x + 10| + 4 < 6$$

$$-\frac{3}{2} < x < -1$$