

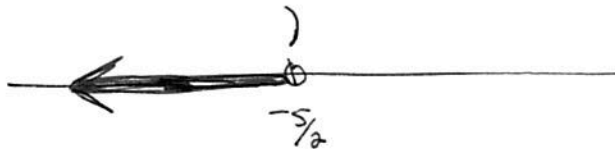
Instructions: Show all work. Give exact answers (improper fractions) and do not round unless specifically asked to do so. If you work the problem in your calculator you can write keystrokes to show work for partial credit.

1. Solve the inequality $\frac{1}{6}x < -\frac{5}{12}$. Draw the solution on a number line.

$$2 \cancel{12} \cdot \frac{1}{6}x < -\frac{5}{\cancel{12} \cdot 12}$$

$$2x < -5$$

$$x < -\frac{5}{2}$$



2. Solve the inequality $\frac{3}{2}x - 2 < \frac{5}{6}x + \frac{1}{3}$. Draw the solution on a number line.

$$3 \cdot \frac{3}{2}x - 6 \cdot 2 < 6 \cdot \frac{5}{6}x + 6 \cdot \frac{1}{3}$$

$$9x - 12 < 5x + 2$$

$$\frac{4x}{4} < \frac{14}{4}$$

$$x < \frac{7}{2}$$

