

## Precalculus Prerequisites Section 0.4 Exercises

1. Solve the equation.

(a)  $\frac{4}{9}|2x - 1| = 8$

(b)  $\frac{|-2x - 3| + 7}{3} = 10$

(c)  $|2t - 3| = |4t + 7|$

(d)  $\sqrt{2}|-4y - 2| = 3|y + 2|$

2. Solve the inequality. Write your answer using interval notation.

(a)  $|4t - 6| < 24$

(b)  $|-2x + 7| \geq 2$

(c)  $\frac{2}{3}|x - 4| - \frac{4}{9}|x - 5| < 3$

(d)  $2 < |2x - 4| + 9 \leq 9\sqrt{2}$