

Inequalities and Absolute Value Equations Review

Solve each inequality and graph its solution.

1) $42 \leq -10 + 4x$

2) $\frac{r-7}{9} \geq 1$

3) $\frac{n}{4} + 7 > 6$

4) $-7k - 4 \leq 17$

Solve each compound inequality and graph its solution.

5) $-10n \leq 90$ and $n - 2 < -7$

6) $-8 + n < -6$ or $-3n < -15$

7) $x + 6 > 7$ and $\frac{x}{9} > -1$

8) $r - 5 < -11$ and $\frac{r}{6} > 1$

Solve each equation.

$$9) |a - 7| = 8$$

$$10) \left| \frac{n}{8} \right| = 3$$

$$11) |x - 5| = -7$$

$$12) \frac{|-8 + m|}{10} = 0$$

$$13) -8|n + 10| = -112$$

$$14) |6p| + 4 = 34$$

$$15) -6 + |6 - k| = -6$$

$$16) |5 + 4x| + 3 = -40$$