

Topic 1 Complex Practice

Solve each equation for the indicated variable.

1) $\frac{k}{x} = \frac{y}{w+v}$, for x

2) $xk = vw - y$, for x

3) $z = n - p - a + m$, for a

4) $g = c - x - r + d$, for x

Solve each compound inequality and graph its solution.

5) $26 \leq 5r + 6 < -44$

6) $-9m + 9 > 36$ or $m - 8 \leq -8$

7) $-1 + 10r \leq 69$ or $3 + r \leq -5$

8) $9 \leq -6 - 3n < 24$

Solve each equation.

9) $-5|-9x + 4| + 4 = -111$

10) $-8|9r - 5| + 3 = -109$

Solve each inequality and graph its solution.

11) $6|6 - 9k| + 10 \leq 28$

12) $9|1 + 3v| - 1 > 35$

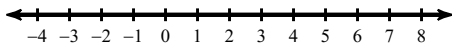
Answers to Topic 1 Complex Practice

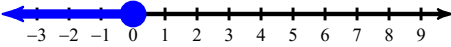
1) $x = \frac{k(w+v)}{y}$

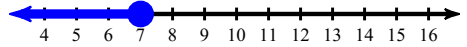
2) $x = \frac{vw-y}{k}$

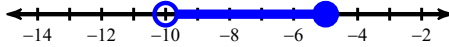
3) $a = -z + n - p + m$

4) $x = -g + c - r + d$

5) No solution. : 

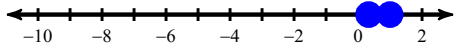
6) $m \leq 0$: 

7) $r \leq 7$: 

8) $-10 < n \leq -5$: 

9) $\left\{-\frac{19}{9}, 3\right\}$

10) $\left\{\frac{19}{9}, -1\right\}$

11) $\frac{1}{3} \leq k \leq 1$: 

12) $v > 1$ or $v < -\frac{5}{3}$: 