

Solving Compound Inequalities

Solve each inequality.

1) $x + 5 < 8$ and $2x < -12$

2) $11 \leq 3 + y$ or $1 + 3y > 4$

3) $-6 < 2a - 4 \leq -10$

4) $2b + 1 < 3$ and $3b + 4 \leq -8$

5) $7u - 3 > 4$ or $u + 2 \geq 9$

6) $n - 2 \leq 3$ and $\frac{n}{7} \leq 8$

7) $-6 < 3m < 15$

8) $6n - 10 \leq 14$ or $9n \leq 18$

Solving Compound Inequalities

Answer key

Solve each inequality.

1) $x + 5 < 8$ and $2x < -12$

$x < -6$

2) $11 \leq 3 + y$ or $1 + 3y > 4$

$y > 1$

3) $-6 < 2a - 4 \leq -10$

No solution

4) $2b + 1 < 3$ and $3b + 4 \leq -8$

$b \leq -4$

5) $7u - 3 > 4$ or $u + 2 \geq 9$

$u > 1$

6) $n - 2 \leq 3$ and $\frac{n}{7} \leq 8$

$n \leq 5$

7) $-6 < 3m < 15$

$-2 < m < 5$

8) $6n - 10 \leq 14$ or $9n \leq 18$

$n \leq 4$