



Algebra 1

Topic: Solving Compound Inequalities

Instructions

Solve the following compound inequalities.

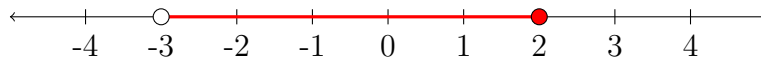
Practice Problems

Solve the Compound Inequalities:

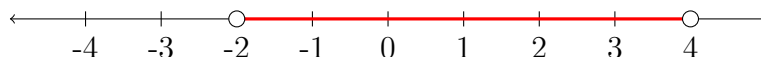
1. $-5 \leq x < 3$
2. $x - 2 > -1$ and $x + 3 \leq 7$
3. $2x + 1 \leq 5$ or $x - 3 > 0$
4. $-3 < 2x \leq 6$
5. $x + 4 > 2$ and $3x - 5 < 10$
6. $x - 1 \geq 0$ or $2x - 7 \leq -3$
7. $-2 \leq \frac{x}{2} < 1$
8. $2x + 3 > 7$ and $x - 1 \leq 4$

Write the Compound Inequality Represented by the Graph

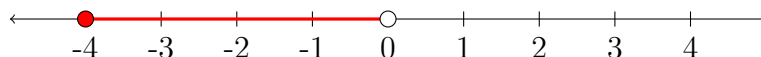
1. Write the compound inequality for the following graph:



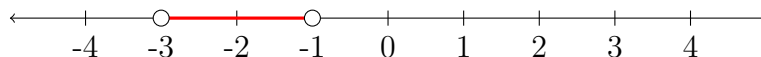
2. Write the compound inequality for the following graph:



3. Write the compound inequality for the following graph:



4. Write the compound inequality for the following graph:



Challenge Problems

1. Solve and graph: $x + 2 \geq 5$ or $2x - 6 < -4$
2. Solve and graph: $2x - 3 > 5$ and $x - 1 \leq 6$
3. Solve and graph: $x + 1 \geq 4$ or $x - 2 < -1$
4. Solve and graph: $x - 4 \geq -2$ and $2x + 1 < 7$

Visit our website: Mathaversity.com