



Algebra 1

Topic: Writing and Graphing Inequalities

Instructions

- Determine if the given value satisfies the inequality.
- Solve inequalities and represent the solution graphically.
- Write inequalities based on conditions provided.
- Write an inequality that represents the graph.

Practice Problems

Check Whether the Value is a Solution to the Inequality:

1. $r + 4 > 8$, $r = 2$
2. $5 - x < 8$, $x = -3$
3. $3s \leq 19$, $s = -6$
4. $17 \geq 2y$, $y = 7$
5. $-1 > -\frac{x}{2}$, $x = 3$
6. $\frac{4}{z} \geq 3$, $z = 2$
7. $14 \geq -2n + 4$, $n = -5$
8. $-5 + (2s) < -1$, $s = 10$
9. $20 \leq \frac{10}{2z} + 20$, $z = 5$
10. $\frac{3m}{6} - 2 > 3$, $m = 8$

Solve and Graph the Inequality:

1. $x \geq 2$
2. $z \leq 5$
3. $-1 > t$
4. $-2 < w$

5. $v \leq -4$

7. $\frac{1}{4} < p$

6. $s < 1$

8. $r \geq |5|$

Write and Graph an Inequality for the Given Solution Set:

1. $\{x|x < 7\}$

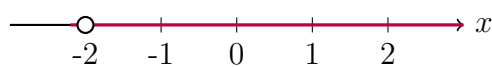
3. $\{y|-3 < y \leq 2\}$

2. $\{n|n \geq -2\}$

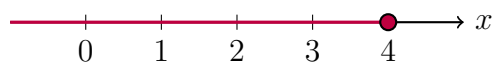
4. $\{m|m > 4\}$

Write an inequality that represents the graph:

1. Write the inequality for the following graph:



2. Write the inequality for the following graph:



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