

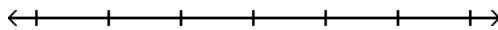
## Inequalities 1

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Solve and graph. Write the solution set in set-builder and interval notation.

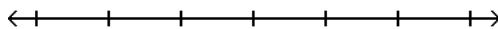
1)  $a - 8 < -10$

1) \_\_\_\_\_



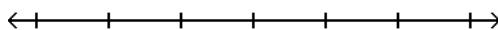
2)  $a + 12 < 18$

2) \_\_\_\_\_



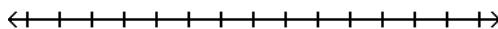
3)  $x + 9 < 14$

3) \_\_\_\_\_



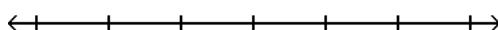
4)  $x - \frac{2}{21} > -\frac{8}{21}$

4) \_\_\_\_\_



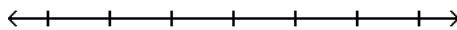
5)  $-3 < \frac{a}{4}$

5) \_\_\_\_\_



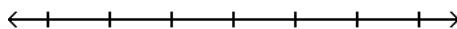
6)  $-10x - 11 > -11x - 18$

6) \_\_\_\_\_



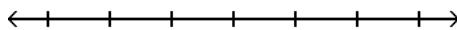
7)  $4z + 7 \leq 3z + 9$

7) \_\_\_\_\_



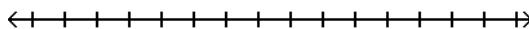
8)  $-9 - 5y + 3 \geq -6y + 1$

8) \_\_\_\_\_

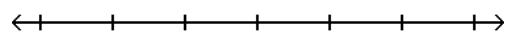


9)  $0.6x + 11 + x > 2x + 14 - 0.5x$

9) \_\_\_\_\_



$$10) \ 9x + 3 > 3(2x - 7)$$

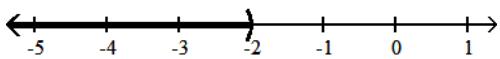


$$10) \underline{\hspace{2cm}}$$

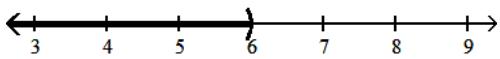
# Answer Key

## Testname: SOLVING INEQUALITIES1

1)  $\{a \mid a < -2\}; (-\infty, -2)$



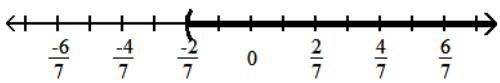
2)  $\{a \mid a < 6\}; (-\infty, 6)$



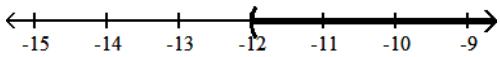
3)  $\{x \mid x < 5\}; (-\infty, 5)$



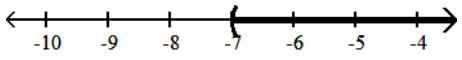
4)  $\left\{x \mid x > -\frac{2}{7}\right\}; \left(-\frac{2}{7}, \infty\right)$



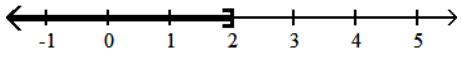
5)  $\{a \mid a > -12\}; (-12, \infty)$



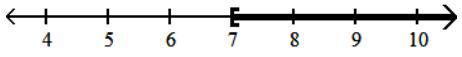
6)  $\{x \mid x > -7\}; (-7, \infty)$



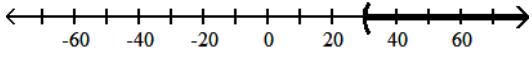
7)  $\{z \mid z \leq 2\}; (-\infty, 2]$



8)  $\{y \mid y \geq 7\}; [7, \infty)$



9)  $\{x \mid x > 30\}; (30, \infty)$



10)  $\{x \mid x > -8\}; (-8, \infty)$

