

Inequalities and Their Graphs Bell Work

Check whether the given number is a solution of the inequality.

1. $2x - 12 < 0$

$x = 6$

2. $x^2 + 3 > 27$

$x = 5$

3. $19 - 2x > 7$

$x = 5$

4. $x(12 - x) < 50$

$x = 4$

Write each algebraic expression from the verbal expression.

5. y is greater than or equal to 6 times x .

6. 16 is greater than 32 plus x .

7. 9 is less than or equal to 21 minus x .

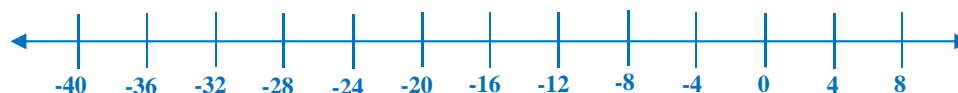
8. x is less than 11 minus y .

Graph each inequality.

9. $y < 8$



10. $y \geq -16$



Inequalities and Their Graphs Bell Work

ANSWER

Check whether the given number is a solution of the inequality.

1. $2x - 12 < 0$ $x = 6$

$2(6) - 12 < 0$

$12 - 12 < 0$

$0 < 0$

2. $x^2 + 3 > 27$ $x = 5$

$5^2 + 3 > 27$

$25 + 3 > 27$

$28 > 27$

3. $19 - 2x > 7$ $x = 5$

$19 - 2(5) > 7$

$19 - 10 > 7$

$9 > 7$

4. $x(12 - x) < 50$ $x = 4$

$4(12 - 4) < 50$

$4(8) < 50$

$32 < 50$

Write each algebraic expression from the verbal expression.

5. y is greater than or equal to 6 times x . $y \geq 6 \cdot x$

6. 16 is greater than 32 plus x . $16 > 32 + x$

7. 9 is less than or equal to 21 minus x . $9 \leq 21 - x$

8. x is less than 11 minus y . $x < 11 - y$

Graph each inequality.

9. $y < 8$



10. $y \geq -16$

