# WARM UP

Solve and graph each inequality

- $4x < 24$
- $x/5 \geq 9$

# MATH COURSE I

Graph Inequalities with 2 Steps

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# VOCABULARY

Inequality: a statement that shows two quantities are **not** equal

< less than

> Greater than

≤ less than or equal to

≥ greater than or equal to

≠ not equal to

# Vocabulary

Open Circle: used to graph answers that are greater than > and less than <

Closed Circle: used to graph answers that are greater than or equal to ≥ and less than or equal to ≤

# Steps

Two-step Inequalities

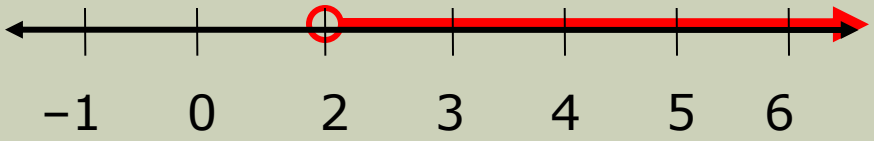
- Solve the inequality
- Create a number line.
- Locate the number on the graph.
- Place an open or closed circle at that point.
- Draw a line with an arrow in the correct direction.

* Steps are the same with one-step inequalities!

# Graph the Solutions

Example:

$3t + 3 > 9$



# Examples

1) $3y + 6 > 12$

2) $t/3 + 3 \geq 12$

3) $2y - 3 < 7$

# You Try!

4) $8x + 70 \leq 150$

5) $6 + 4d \geq 31$

# Solve and Graph

1) $7m + 7 < 21$

2) $e/5 > 4$

3) $3x - 4 < 32$

4) $7 + 4r \geq 31$