Graphing Inequalities on a Number Line

ANSWER / CASE 1

Graph x > -2 on a number line. Give interval notation and state whether -2 is included.

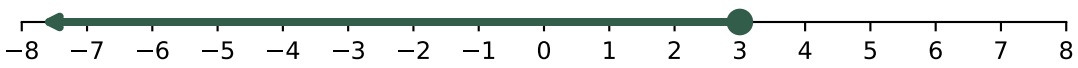


(-2, infinity); endpoint excluded.
1. Use a filled endpoint for <= or >=; use an open endpoint for < or >.
2. Shade right for greater values or left for smaller values.

Graphing Inequalities on a Number Line

ANSWER / CASE 2

Graph x <= 3 on a number line. Give interval notation and state whether 3 is included.

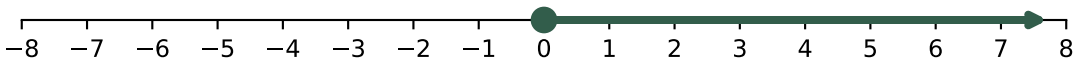


(-infinity, 3]; endpoint included.
1. Use a filled endpoint for <= or >=; use an open endpoint for < or >.
2. Shade right for greater values or left for smaller values.

Graphing Inequalities on a Number Line

ANSWER / CASE 3

Graph x >= 0 on a number line. Give interval notation and state whether 0 is included.

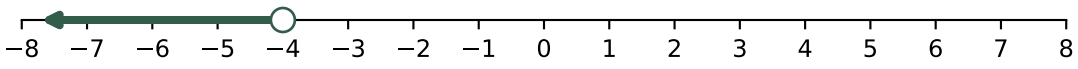


[0, infinity); endpoint included.
1. Use a filled endpoint for <= or >=; use an open endpoint for < or >.
2. Shade right for greater values or left for smaller values.

Graphing Inequalities on a Number Line

ANSWER / CASE 4

Graph x < -4 on a number line. Give interval notation and state whether -4 is included.



(-infinity, -4); endpoint excluded.
1. Use a filled endpoint for <= or >=; use an open endpoint for < or >.
2. Shade right for greater values or left for smaller values.