

Grade 6 - Inequalities on the Number Line - Test

Common Core 6.EE.B.5, 6.EE.B.8 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

This 45-minute test has 9 questions worth 20 points. It covers testing solutions, graphing inequalities, writing inequalities from words and graphs, and real-world constraints (Common Core 6.EE.B.5 and 6.EE.B.8). Show your work.

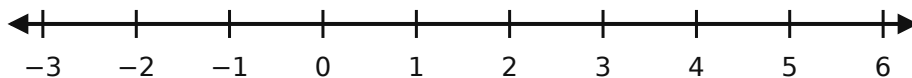
About this test

- Grade: Grade 6
- Chapter: Inequalities on the Number Line
- Standards: 6.EE.B.5, 6.EE.B.8
- Time: 45 minutes
- Total: 20 points

Question 1 - Is it a solution? [2 pts]

- Is 9 a solution of $x < 9$?
- Is 4 a solution of $x \geq 4$?

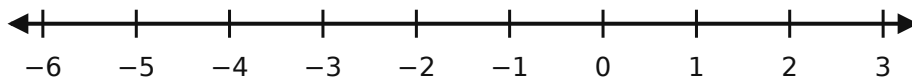
Question 2 - Graph [2 pts]



Number line.

Graph $x > 1$ on the number line.

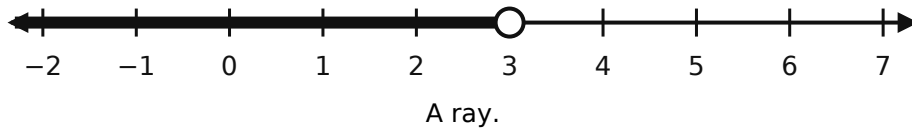
Question 3 - Graph with closed circle [2 pts]



Number line.

Graph $x \leq -2$ on the number line.

Question 4 - Write from a graph [2 pts]



Write the inequality shown by the graph.

Question 5 - Words to inequality [2 pts]

- a. A number n is at least 18.
- b. A number n is no more than 6.

Question 6 - List solutions [2 pts]

List three solutions of $x < -1$. Is -1 a solution? Explain.

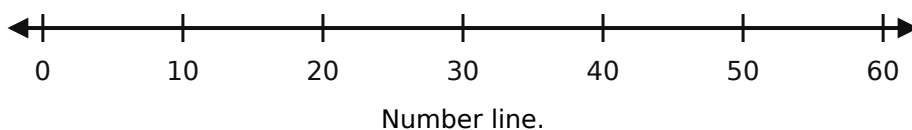
Question 7 - Real-world constraint [2 pts]

A weight limit for a small boat is 450 pounds. Write an inequality for the allowed total weight w . Can a group weighing 452 pounds ride?

Question 8 - Infinitely many solutions [3 pts]

Explain why $x \geq 4$ has infinitely many solutions, and tell whether it has a least solution.

Question 9 - Write and graph [3 pts]



A store gives free shipping when an order total t is more than \$35. Write an inequality, graph

it, and tell whether an order of \$35 gets free shipping.