

Grade 6 - Inequalities on the Number Line - Test Answer Key

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

Use this key to score the inequalities test out of 20 points. Each solution is fully worked, and the scoring line explains how to award each point and partial credit.

Grade 6 · Common Core State Standards: **6.EE.B.5, 6.EE.B.8**

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

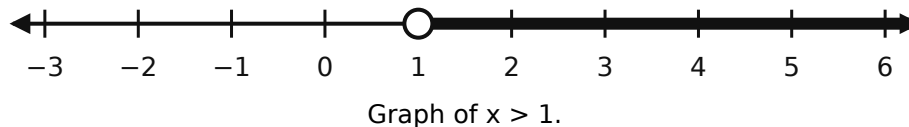
(a) $9 < 9$ is false: no.

(b) $4 \geq 4$ is true: yes.

Scoring: 1 point for each part.

Question 2 - Graph [2 pts]

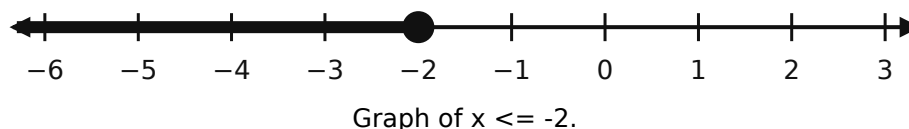
Open circle at 1 and shade to the right.



Scoring: 1 point for the open circle at 1; 1 point for the ray to the right.

Question 3 - Graph with closed circle [2 pts]

Closed circle at -2 and shade to the left.



Scoring: 1 point for the closed circle at -2; 1 point for the ray to the left.

Question 4 - Write from a graph [2 pts]

$$x < 3.$$

Scoring: 1 point for the correct symbol; 1 point for the number 3.

Question 5 - Words to inequality [2 pts]

$$(a) n \geq 18. (b) n \leq 6.$$

Scoring: 1 point for each inequality.

Question 6 - List solutions [2 pts]

Sample: -2 , -5 , -10.5 .

$-1 < -1$ is false, so -1 is not a solution.

Scoring: 1 point for three correct solutions; 1 point for the explanation.

Question 7 - Real-world constraint [2 pts]

$$w \leq 450.$$

$452 \leq 450$ is false, so the group cannot ride.

Scoring: 1 point for the inequality; 1 point for the correct decision with a reason.

Question 8 - Infinitely many solutions [3 pts]

Every number 4 or greater is a solution, including 4, 4.001, 5, and 1,000.

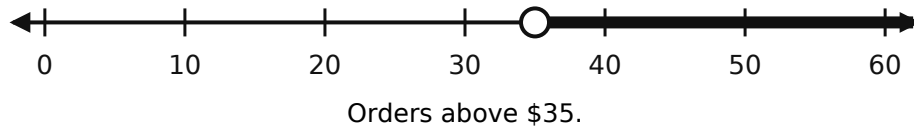
It has a least solution, 4, but no greatest solution.

Scoring: 1 point for infinitely many; 1 point for 4 being included; 1 point for no greatest solution.

Question 9 - Write and graph [3 pts]

$t > 35$. Open circle at 35 and shade right.

\$35 is not more than \$35, so no free shipping.



Scoring: 1 point for the inequality; 1 point for the graph; 1 point for the decision.

Total
20 points