



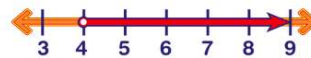
# Algebraic Inequalities

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 What does the sign  $\leq$  mean?

- A greater than
- B less than
- C greater than or equal to
- D less than or equal to

2 What does the **circle** by the number 4 on the number line shown mean?



- A That 4 is part of the answer.
- B That 4 is not part of the answer.
- C That 4 is double two.
- D The answer is less than 4.

3 What does the **circle** by the number -2 on the number line shown mean?



- A That -2 is not part of the answer.
- B The answer is greater than -2.
- C That -2 is part of the answer.
- D That -2 is greater than 0.

4 When an **inequality** is multiplied or divided by a negative number, the **sign** stays the same.

True or false?

- A true
- B false

5 What is the answer shown on the **number line**?

- A  $x < 8$
- B  $x > 8$
- C  $x \leq 8$
- D  $x \geq 8$



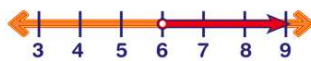
6 What is the answer shown on the **number line**?

- A  $x < -3$
- B  $x > -3$
- C  $x \leq -3$
- D  $x \geq -3$



7 What is the answer shown on the **number line**?

- A  $x < 6$
- B  $x > 6$
- C  $x \leq 6$
- D  $x \geq 6$



8 Which statement represents  **$x$  is less than or equal to five**?

- A  $x < 5$
- B  $x > 5$
- C  $x \leq 5$
- D  $x \geq 5$

9 Which statement represents **six is greater than two times a number**?

- A  $6 < 2x$
- B  $6 > 2 + x$
- C  $6 \geq 2 + x$
- D  $6 > 2x$

10 Which statement represents **three times a number plus 12 is less than or equal to 48**?

- A  $3x + 12 \leq 48$
- B  $3x + 12 \geq 48$
- C  $3x \leq 48 + 12$
- D  $3x \geq 48 - 12$



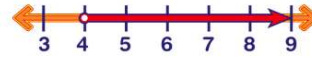
## ANSWER KEY

What does the sign  $\leq$  mean?

- A greater than
- B less than
- C greater than or equal to
- D less than or equal to

(d)

What does the **circle** by the number 4 on the number line shown mean?



(b)

- A That 4 is part of the answer.
- B That 4 is not part of the answer.
- C That 4 is double two.
- D The answer is less than 4.

What does the **circle** by the number -2 on the number line shown mean?



(c)

- A That -2 is not part of the answer.
- B The answer is greater than -2.
- C That -2 is part of the answer.
- D That -2 is greater than 0.

When an **inequality** is multiplied or divided by a negative number, the **sign** stays the same.

True or false?

(b)

- A true
- B false

What is the answer shown on the **number line**?

- A  $x < 8$
- B  $x > 8$
- C  $x \leq 8$
- D  $x \geq 8$



(a)

What is the answer shown on the **number line**?

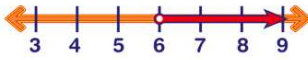
- A  $x < -3$
- B  $x > -3$
- C  $x \leq -3$
- D  $x \geq -3$



(d)

What is the answer shown on the **number line**?

- A  $x < 6$
- B  $x > 6$
- C  $x \leq 6$
- D  $x \geq 6$



(b)

Which statement represents  **$x$  is less than or equal to five**?

- A  $x < 5$
- B  $x > 5$
- C  $x \leq 5$
- D  $x \geq 5$

(c)

Which statement represents **six is greater than two times a number**?

- A  $6 < 2x$
- B  $6 > 2 + x$
- C  $6 \geq 2 + x$
- D  $6 > 2x$

(d)

Which statement represents **three times a number plus 12 is less than or equal to 48**?

- A  $3x + 12 \leq 48$
- B  $3x + 12 \geq 48$
- C  $3x \leq 48 + 12$
- D  $3x \geq 48 - 12$

(a)