Assessment

Lesson-17

Express the inequalities in interval notation $\quad x \geq 2$

A. $(-\infty, 2)$

B. $(2, \infty)$

C. $(-\infty, 2)$

D. $[2, \infty)$

Express the inequalities in interval notation $-1 \leq x < 4$

A. $[-1, 4)$

B. $(-1, 4]$

C. $[-1, 4]$

D. $[-1, 4]$

Which interval notation represents the set of all numbers from 2 through 7 inclusive?

A. $(2,7)$

B. $(2,7]$

C. $[2,7]$

D. $[2,7)$

Solve the following compound inequality and choose the correct answer: $-19 < 3x - 4 < 5$

A. $-26 < x < -2$

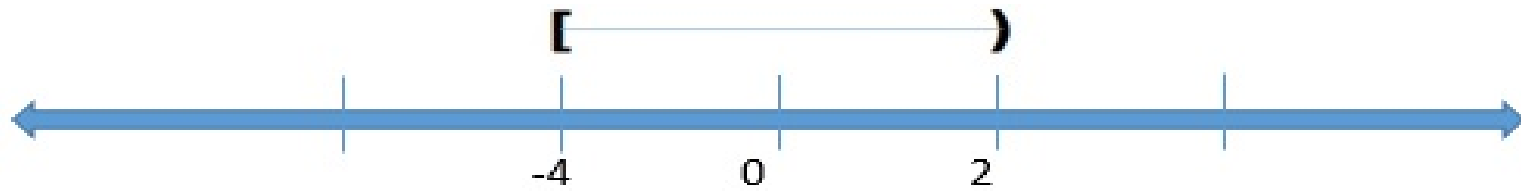B. $-5 < x < 3$

C. $-18 < x < 6$

D. $-9 < x < 3$

Which compound inequality represents the following graph

A. $-2 \leq x < 4$

B. $-4 \leq x < 2$

C. $-4 < x \leq 2$

D. $-4 \leq x \leq 2$
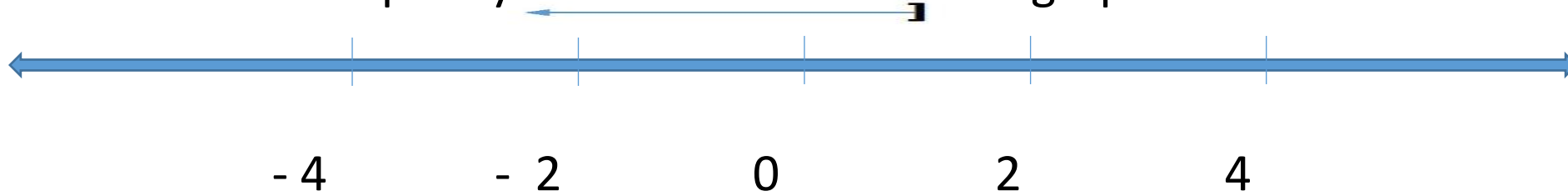
Write an inequality to describe the region represented on the number line below

-1   0   1   2
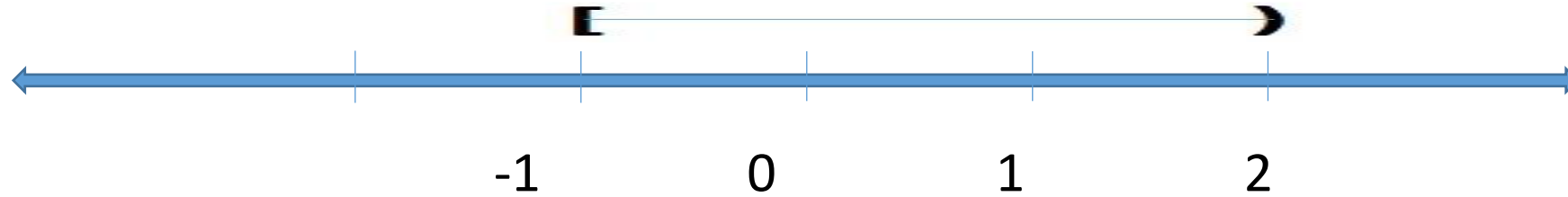
A. $-1 \leq x \leq 2$

B. $-1 < x < 2$

C. $-1 < x > 2$

D. $-1 \leq x < 2$

Choose the best inequality that best describes the graph below

- 4   - 2   0   2   4

A.   25≥5(2x+3)

B. $5(2x+3) > 25$

C. $5(2x+3) < 25$

D. $25 \leq 5(2x+3)$

Solve this quadratic inequality $\quad 9 - x^2 \leq 0$

A. $(-\infty, -3] \cup [3, \infty)$

B. $(-3, 3)$

C. No real number solutions

Solve this quadratic inequality $3x^2 + 6x - 45 \leq 0$

A. $-5 \leq x \leq 3$

B. $(-5, 3)$

C. $-3 \leq x \leq 5$

D. $[-3, 5]$