

Directions: Please choose the best answer choice for each of the following questions.

1. Solve for x .

$$5 - x > 2$$

- A. $x > -3$
- B. $x < -3$
- C. $x > 3$
- D. $x < 3$

Answer Choice Rationale

- A. No rationale available
- B. No rationale available
- C. No rationale available
- D. Correct

ItemID A2KC.1087285
 Correct D
 Standard(s) MA.9-12.MA.912.A.3.4

2. What is the solution to the inequality $-3(x + 2) > -9$?

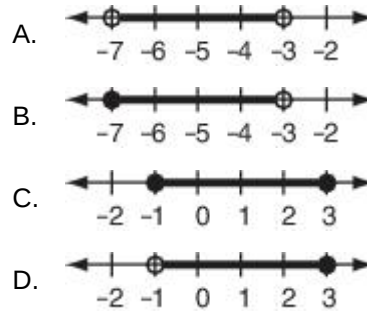
- A. $x < 1$
- B. $x > -1$
- C. $x < 5$
- D. $x > -5$

Answer Choice Rationale

- A. Correct
- B. No rationale available
- C. No rationale available
- D. No rationale available

ItemID A2KC.1142458
 Correct A
 Standard(s) MA.9-12.MA.912.A.3.4

3. Which graph represents the solution set of $-7 < x - 6 \leq -3$?



Answer Choice Rationale

- A. This answer does not solve the inequality for x by adding 6 to both sides of the inequality, and uses an open circle for $x \leq -3$ instead of a closed circle. This is the graph of $-7 < x < -3$.
- B. This answer does not solve the inequality for x by adding 6 to both sides of the inequality, and reverses the open circle and the closed circle. This is the graph of $-7 \leq x < -3$.
- C. This answer solves the inequality correctly, but uses a closed circle for $-1 < x$ instead of an open circle.
- D. Correct answer.

ItemID A2K.1048442
 Correct D
 Standard(s) MA.9-12.MA.912.A.3.4

4. Which of the following is equivalent to $-8x - 4 > 20$?

- A. $x < -3$
- B. $x < -2$
- C. $x > 2$
- D. $x > 3$

Answer Choice Rationale

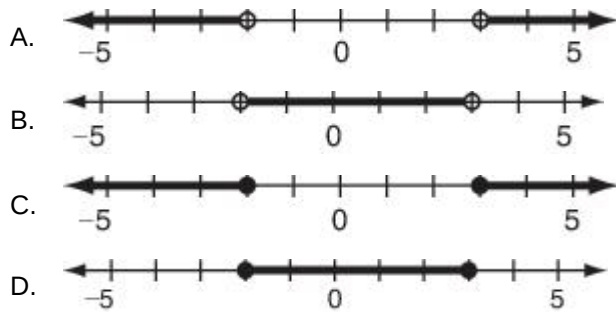
- A. Correct
- B. No rationale available
- C. No rationale available
- D. No rationale available

ItemID A2KC.1132112
 Correct A
 Standard(s) MA.9-12.MA.912.A.3.4

Go on to the next page »

5. Which number line shows the solution to this inequality?

$$-4 \leq 2x \leq 6$$



Answer Choice Rationale

- A. This answer incorrectly uses open endpoint circles and the direction of each area shaded is incorrect.
- B. This answer shades the correct area of the number line, but the endpoint circles are open and represent greater than and less than instead of greater than or equal to and less than or equal to.
- C. This answer uses the correct endpoints, but the direction of each area shaded is incorrect.
- D. Correct answer

ItemID A2K.1021413
 Correct D
 Standard(s) MA.9-12.MA.912.A.3.4