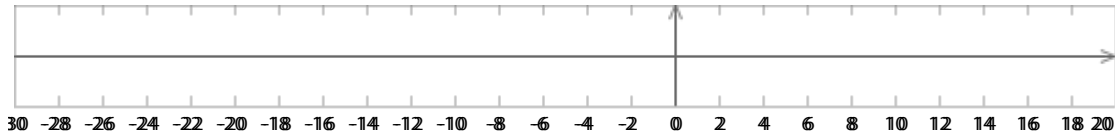


Alg 2 1.6 Homework

Question 1.

Solve the equation $\frac{1}{2}|x + 1| = 10$. Graph the solutions on the number line.



Smaller solution

Larger solution



Alg 2 1.6 Homework

Question 2.

Solve $-2|3x - 7| + 10 = 6$ algebraically. Graph the solutions on the number line.



Smaller solution

Larger solution



Alg 2 1.6 Homework

Question 3.

Consider the absolute-value equation $5\left|\frac{1}{2}x + 4\right| + 8 = 4$.

Part 1

How many solutions are there to the equation?

- A.** There are no solutions.
- B.** There is one solution.
- C.** There are two solutions.
- D.** There are infinitely many solutions.

Part 2

How do you know there are no solutions?

- A.** An absolute value cannot be equal to a negative number.
 - B.** An absolute value must be equal to a positive number.
 - C.** An absolute value must be equal to an integer.
 - D.** An absolute value cannot be equal to a fraction.
-

Alg 2 1.6 Homework

Question 4.

Consider the absolute-value equation $5\left|\frac{1}{2}x + 3\right| + 6 = 6$.

Part 1

How many solutions are there to the equation?

- A.** There are no solutions.
- B.** There is one solution.
- C.** There are two solutions.
- D.** There are infinitely many solutions.

Part 2

Solve for x .

$x =$
