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Which of the following expressions is equal to 0 for some value of x ?

- A) $|x - 1| - 1$
- B) $|x + 1| + 1$
- C) $|1 - x| + 1$
- D) $|x - 1| + 1$

2

8

For what value of n is $|n - 1| + 1$ equal to 0 ?

- A) 0
- B) 1
- C) 2
- D) There is no such value of n .

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How many solutions does the equation $|x + 7| = -4$ have?

- A) Zero
- B) Exactly one
- C) Exactly two
- D) More than two

4

2

$$|2x - 4| = 8$$

What is the positive solution to the given equation?

- A) 2
- B) 4
- C) 6
- D) 8

5

5

$$|x - 1| = 8$$

If x is a solution to the given equation, what is a possible value of $x - 1$?

- A) -8
- B) -6
- C) 6
- D) 7

6

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$$|2x + 6| + 4 = 8$$

What is the sum of the solutions to the given equation?

- A) -6
- B) -3
- C) 0
- D) 8

7

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$$|5 - x| = 4$$

The value of one solution to the equation above is 1. What is the value of the other solution?

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$$|x+1|=5$$

What positive value of x satisfies the given equation?

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$$|2x + 1| = 5$$

If a and b are the solutions to the equation above, what is the value of $|a - b|$?

10

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Let x and y be numbers such that $-y < x < y$. Which of the following must be true?

- I. $|x| < y$
- II. $x > 0$
- III. $y > 0$

A) I only
 B) I and II only
 C) I and III only
 D) I, II, and III

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Two different points on a number line are both 3 units from the point with coordinate -4 . The solution to which of the following equations gives the coordinates of both points?

- A) $|x + 4| = 3$
- B) $|x - 4| = 3$
- C) $|x + 3| = 4$
- D) $|x - 3| = 4$

12

31

If $|2x + 3| = 5$ and $|3y - 3| = 6$, what is one possible value of $|xy|$?

1A 3A 5A 79 95 11A
2D 4C 6A 84 10C 12 1, 3, 4, 12