

Quiz: Integers

Section: Integers

Sub-section: Opposite Numbers and Absolute Value

Choose the correct answer.

1. Calculate $|39 - 75|$.

A. 34

B. 36

C. 44

D. 46

Solution 36

$$|39 - 75| = |-36| = 36$$

2. Calculate $|73 - 39|$.

A. 34

B. 36

C. 44

D. 46

Solution 34

$$|73 - 39| = |34| = 34$$

3. Calculate $|13 - 5 \times 9|$.

A. 12

B. 22

C. 32

D. 72

Solution 32

$$|13 - 5 \times 9| = |13 - 45| = |-32| = 32$$

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4. Calculate $|7 \times 12 - 10|$.

- A. 14
- B. 34
- C. 54
- D. 74**

Solution 74

$$|7 \times 12 - 10| = |84 - 10| = |74| = 74$$

5. Calculate $3 \times |4 - 6 \times 2| + 1$.

- A. 1
- B. 13
- C. 25**
- D. 27

Solution 25

$$3 \times |4 - 6 \times 2| + 1 = 3 \times |4 - 12| + 1 = 3 \times 8 + 1 = 24 + 1 = 25$$

6. Calculate $10 - 8 \times |4 + 3 - 12|$.

- A. - 30**
- B. - 10
- C. 10
- D. 50

Solution - 30

$$10 - 8 \times |4 + 3 - 12| = 10 - 8 \times |- 5| = 10 - 8 \times 5 = 10 - 40 = - 30$$

7. Calculate $|91 - |83 - 102||$.

- A. 72**
- B. 82
- C. 100
- D. 110

Solution 72

$$|91 - |83 - 102|| = |91 - |- 19|| = |91 - 19| = |72| = 72$$

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8. Calculate $||99 - 123| + 123|$.

- A. 99
- B. 137
- C. 147
- D. 157

Solution 147

$$||99 - 123| + 123| = ||-24| + 123| = |24 + 123| = |147| = 147$$

9. Which of the following statements is true?

- A. Any integer has another integer having the same absolute value.
- B. Absolute value of any integer is always greater than 0.
- C. There is some integer having absolute value less than itself.
- D. Absolute value can be positive or zero.

Solution Absolute value can be positive or zero.

- A) False, 0 is the only number whose absolute value is 0.
- B) False, $|0| = 0$ is not positive.
- C) False, there is no integer having absolute value less than itself.
- D) True, consider by case.