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

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

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

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

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.