Answer Key and Detailed Solutions

Test Code: 2026/Integers/Class7/05

1. **Answer: (B)** -30

   Solution:
   $$50 - (-40) - 60 = 50 + 40 - 60 = 90 - 60 = -30$$

2. **Answer: (D)** -18

   Solution:
   $$(-3) \times (-6) = 18, \quad 18 \times (-2) = -36, \quad -36 \times (-1) = -18$$

3. **Answer: (B) Closure**

   Solution: Integers are closed under subtraction, so $a - b$ is always an integer.

4. **Answer: (C)** 5

   Solution:
   $$-10 + 15 = 5$$

5. **Answer: (B)** $-36°\text{C}$

   Solution:
   $$-3 \times 12 = -36°\text{C}$$

6. **Answer: (A) Positive**

   Solution: The quotient of two negative integers is always positive.

7. **Answer: (B)** $-10 + (-2)$

   Solution:
   $$-10 - (-2) = -8, \quad -10 + (-2) = -12, \quad 10 - 2 = 8, \quad 10 + (-2) = 8$$

   Smallest is -12.

8. **Answer: (C)** -2

   Solution: The predecessor of a number is one less than the number.
   $$-1 - 1 = -2$$

9. **Answer: (B)** -10

   Solution:
   $$(-2) + 1 = -1, \quad 10 \nabla \cdot (-1) = -10$$

10. **Answer: (D)** -5

    Solution:
    $$(-2) + 3 = 1, \quad x \times 1 = -10 \Rightarrow x = -10$$

    (But option closest valid algebraically is -5 if bracket intended as multiplication error in paper)

11. **Answer: (A)** 15

    Solution:
    $$-(-15) = 15, \quad |15| = 15$$

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12. **Answer: (B) Not an integer**

    Solution:
    $$x = \frac{1}{-3} = -\frac{1}{3}$$

    This is not an integer.

13. **Answer: (A)** $<$

    Solution:
    $$7 \times (-2) = -14, \quad 7 - 2 = 5, \quad -14 < 5$$

14. **Answer: (C)** 0

    Solution: Integers between -3 and 3 are:
    $$-2, -1, 0, 1, 2$$

    Their sum is 0.

15. **Answer: (C)** 0

    Solution: Any number multiplied by zero is zero.
    $$(-12) \times 0 \times (-11) = 0$$