



DAV NUPPL Public School

NUPPL Township, Ghatampur, Kanpur Nagar, UP-209206

Assignment: Half yearly

Class : VI

Subject:

Mathematics

CH: 3 – INTEGER

CH: 4 – INTRODUCTION TO ALGEBRA

CH: 8- BASIC GEOMETRICAL CONCEPT

CH: 15- PERIMETER AND AREA

Assertion and Reason Based MCQs

Directions: In the following questions, A statement of Assertion (A) is followed by a statement of Reason (R).

Mark the correct choice as,

- (A) Both A and R are true but R is the correct explanation of A
- (B) Both A and R are true but R is NOT the correct explanation of A
- (C) A is true but R is false
- (D) A is false and R is True

1. Assertion (A) – The first numbers to be discovered were natural numbers i.e. 0,1, 2, 3, 4,...
Reason (R) – this collection of numbers is known as Integers
2. Assertion (A) – -2,-5,-1,0,-3
Reason (R) – Negative integers
3. Assertion (A) – 4,6,5,8,7,0
Reason (R) – Positive integers
4. Assertion (A) – The succeeding number of the number – 1 is 0
Reason (R) – Succeeding number is the number which comes after a number
5. Assertion (A) – The expression for ‘1’ subtracted from p’ is p-1.
Reason (R) – Any equation like the above, is a condition on a variable. It is satisfied only for a definite value of the variable.
6. Assertion (A) – $3(2)+5=11$
Reason (R) – The value of the variable in an equation which satisfies the equation is called a solution to the equation.
7. Assertion (A) –All objects have different shapes.
Reason (R) –Even today geometrical ideas are reflected in all forms of art, measurements, architecture, engineering, cloth designing etc.
8. Assertion (A) –Sharper the tip, thinner will be the dot
Reason (R) –A point determines a location
9. Assertion (A) –A line contains a countless number of points
Reason (R) –Line extends indefinitely in both directions.
10. Assertion (A) – Perimeter of a rectangle = $2 \times (\text{Length} \times \text{Breadth})$.
Reason (R) – Perimeter is the distance covered along the boundary forming a closed figure when you go round the figure once
11. Assertion (A) – Area of a rectangle =Length + Breadth
Reason (R) – The amount of surface enclosed by a closed figure is called its area
12. Assertion (A) – Apala went to a park 20 m long and 10 m wide. She took one complete round of it. The distance covered by her is 60m.
Reason (R) – The amount of surface enclosed by a closed figure is called its area
13. Assertion (A) – The area of a rectangular sheet of paper is 20 cm^2

Reason (R) – The amount of surface enclosed by a closed figure is called its area

CHOOSE THE CORRECT ANSWER

- Which of the following statement is true?
(a) $-7 > -5$ (b) $-7 < -5$ (c) $(-7) + (-5) > 0$ (d) $(-7) - (-5) > 0$
- 5 less than -2 is
(a) 3 (b) -3 (c) -7 (d) 7
- 5 less than -2 is
(a) 3 (b) -3 (c) -7 (d) 7
- $(-35) + (-32)$ is equal to
(a) 67 (b) -67 (c) -3 (d) 3
- The successor of -22 is
(a) -23 (b) -21 (c) 23 (d) 21
- If the sum of two integers is -26 and one of them is 14, then the other integer is
(a) -12 (b) 12 (c) -40 (d) 40
- 5 more than twice a number x is written as
(a) $5 + x + 2$ (b) $2x + 5$ (c) $2x - 5$ (d) $5x + 2$
- The quotient of x by 2 is added to 5 is written as
(a) $x/2 + 5$ (b) $2/x+5$ (c) $(x+2)/5$ (d) $x/(2+5)$
- 9 taken away from the sum of x and y is
(a) $x + y - 9$ (b) $9 - (x+y)$ (c) $x+y/9$ (d) $9/ x+y$
- The vertex of an angles lies
(a) in its interior (b) in its exterior (c) on the angle (d) inside the angle
- The figure formed by two rays with the same initial point is known as
(a) a ray (b) a line (c) an angle (d) a line segment
- An angle of measure 90° is called
(a) a complete angle (b) a right angle (c) a straight angle (d) a reflex angle
- The sides of a rectangle are in the ratio 5: 4. If its perimeter is 72 cm, then its length is
(a) 40 cm (b) 20 cm (c) 30 cm (d) 60 cm
- The cost of fencing a rectangular field 34 m long and 18 m wide at Rs 2.25 per meter is
(a) Rs 243 (b) Rs 234 (c) Rs 240 (d) Rs 334
- If the cost of fencing a rectangular field at Rs. 7.50 per meter is Rs. 600, and the length of the field is 24 m, then the breadth of the field is
(a) 8 m (b) 18 m (c) 24 m (d) 16 m

TWO MARKS QUESTIONS

- Represent the following on number line:
(a) -5 (b) 4
- Identify the negative integers from the given numbers.
 $-5, 3, 0, 5, -6, 7, 3, 4, -4, -7$
- Write the following integers in their increasing order.
 $-3, 0, -6, 5, -4, 6, 3, -8$
- Write all the integers between the following pair of integers:
(a) 0 and -4 (b) -5 and 5 (c) -8 and -13 (d) 3 and 6
- Find the solution of the following additions using number line:
(a) $(-3) + 5$ (b) $(-5) + (-2)$
- Find the sum of the following integers:
(a) $(-8) + (+5) + (-3) + (-2)$ (b) $(-7) + (-9) + (+4) + (+3)$
- Write the following using numbers, literals and signs of basic operations:
(i) The sum of 6 and x . (ii) 3 more than a number y .
(iii) One-third of a number x . (iv) One-half of the sum of number x and y .

- (v) Number y less than a number 7. (vi) 7 taken away from x .
 (vii) 2 less than the quotient of x and y . (viii) 4 times x taken away from one-third of y .
 (ix) Quotient of x by 3 is multiplied by y .
8. Think of a number. Multiply by 5. Add 6 to the result. Subtract y from this result. What is the result?
 9. If it costs ₹ 420 to fence a square park at the rate of ₹ 6 per metre. Find the length and area of the square park.
 10. Find the area of a rectangle if its length and breadth are 28cm and 120mm respectively.
 11. Find the area of a rectangle whose length is 4cm and breadth is 2cm.

THREE MARKS QUESTIONS

1. Ramesh thinks of an integer. He subtracts 12 from it and gets the result as -6 . What was the integer he thought of?
2. Find the answers to the following terms:
 (a) $35 - (20)$ (b) $72 - (90)$ (c) $(-15) - (-18)$
 (d) $(-20) - (13)$ (e) $23 - (-12)$ (f) $(-32) - (-40)$
3. Fill in the following blanks with $>$, $<$ or $=$ sign (greater, lesser or equal sign)
 (a) $(-3) + (-6)$, $(-3) - (-6)$
 (b) $(-21) - (-10)$, $(-31) + (-11)$
 (c) $45 - (-11)$, $57 + (-4)$
 (d) $(-25) - (-42)$, $(-42) - (-25)$
4. The number of rooms on the ground floor of a building is 12 less than the twice of the number of rooms on first floor. If the first floor has x rooms, how many rooms does the ground floor has?
5. One apple weighs 75 grams and one orange weighs 40 grams. Determine the weight of x apples and y oranges.
6. Sammy has 16 square stamps of sides 4 cm each. She glues them onto an envelope to form a bigger square. What area of the envelope does the bigger square cover?
7. Find the cost of fencing a square park of side 300m at the rate of Rs 20 per metre.
8. The dimensions of a photographs are 30 cm \times 20 cm. What length of wooden frame is needed to frame the picture?
9. Find the cost of fencing a rectangular park of length 175 m and breadth 125 m at the rate of Rs 12 per meter

FIVE MARKS QUESTIONS

1. Add:
 (a) $-19+36$ (b) $-49+27$
2. The sum of the two integers is -38 . Suppose one of them is 240. Find the other.
3. A class test contained 25 questions, 4 marks are given to students for each correct answer, and (2) marks are given for every wrong answer. A student attempts all questions and 20 of his answers are correct. What is the total score given to the student?
4. The temperature of a place at 12:00 noon was found to be $+5^{\circ}\text{C}$. The temperature increased by three $^{\circ}\text{C}$ in the first hour and then decreased by one $^{\circ}\text{C}$ in the next hour. What will be the temperature at 2:00 pm?
5. Solve the terms given below-
 (a) $(-13) + 32 - 8 - 1$ (b) $72 - 90$ (c) $(-15) - (-18)$ (d) $-9568 + (-695)$
6. Binny spend Rs a daily and saves Rs b per week. What is her income for two weeks?
7. One pencil costs Rs 2 and one fountain pen costs Rs 15. What is the cost of x pencils and y fountain pens?
8. Shikha runs around a square of side 75 m. Priya runs around a rectangle with length 60 m and breadth 45 m. Who covers the smaller distance?
9. A verandah 15 m long and 12 m broad is to be paved with tiles each measuring 500 cm \times 300 cm. Find the number of tiles needed to cover the whole verandah?

CASE STUDY BASED QUESTIONS

1. Mr. Kumar is a business man as well as social worker. He always works for the welfare of the villagers. In his village there was no school building so he plans to construct a school in his village. The length and breadth of the school plot are in the ratio 10:3. The perimeter of the school plot is 260 m. He also gave a small square plot for playground near to the school. The area of the square plot is equal to the length of the school plot.

Based on this information answer the following questions

- Find the length of the plot.
 - Find the breadth of the plot
 - Find area of the square plot
 - Find the cost of fencing the school plot at the rate of ₹ 25 per square meter .
2. Four friends Roshan, Narun, Mohit and Shaun went for trekking to enjoy their summer vacations. Shaun reached the peak and found he was 1500m above the sea level. All friends were at equal distance from each other.

Based on this information answer the following questions

- Express the height where Shaun is (in integers)
a) 1500 m b) -1500 m c) 750m d) None of these
 - As they climbed higher the temperature dropped 15 degree below zero. Express it in integers.
a) 150 C b) -150 C c) 00 C d) 300 C
 - What integer will represent the sea level?
a) 1000m b) 100m c) 0m d) 1m
 - Roshan slips from his position and falls into the sea where he reaches 650m below the sea level. He observes a submarine 75 m below him. What is the distance between the sea level and the submarine?
a) -650m b) -725m c) -575m d) -75m
 - What will be the absolute value of the distance from the sea level after Roshan slipped?
a) 650 b) -650 c) 1650 d) -1650
3. The students were asked to draw a closed figure with few points inside the figure, few points outside the figure and few on the boundary of the figure. One of the child drew a figure like this:



- Where do points C, Z, M lie in the figure.
(a) Interior (b) Exterior (c) On the boundary (d) None of the above.
- Which points lie in the exterior of the figure?
(a) Q, R, O, S (b) C, Z, M (c) P, K (d) All of these
- What kind of figure is it ?
(a) Point (b) Simple closed figure (c) Circle (d) None
- Write any two letters of the English alphabet which are closed figures.