



St. XAVIER'S HIGH SCHOOL

Date:	Grade: VII	Topic: Algebra	Exit Card (M.M. 20)
Name:	Roll No.		

A. Fill in the blanks. ($4 \times 1 = 4$ marks)

1. In algebra, we use _____ to represent variables (generalized numbers).
2. If Jaggu's present age is x years, then his age 7 years from now will be _____.
3. If one pen costs ₹ x , then the cost of 9 pens is _____.
4. The solution of $3x + 1 = x + 5$ is $x =$ _____.

B. Multiple Choice Questions. ($4 \times 1 = 4$ marks)

1. The correct algebraic statement for "a number x is increased by 5 and the result is multiplied by 2 to get 24" is:
(a) $x + 5 \times 2 = 24$ (b) $(x + 5) \times 2 = 24$ (c) $2 \times x + 5 = 24$ (d) $x + 5 = 2 \times 24$
2. Which of the following is an equation?
(a) $x + 5$ (b) $7x$ (c) $2y + 3 = 11$ (d) $2p < 7$
3. If the perimeter of a regular hexagon is x metres, then the length of each side is:
(a) $x + 6$ metres (b) $x - 6$ metres (c) $x \div 6$ metres (d) $6 \div x$ metres
4. The solution of the equation $3x - 2 = 10$ is:
(a) $x = 1$ (b) $x = 2$ (c) $x = 3$ (d) $x = 4$

C. Assertion–Reason Question. ($1 \times 1 = 1$ mark)

Choose the correct option:

- (a) Both Assertion (A) and Reason (R) are true, and 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, but R is true.

Assertion (A): 7 subtracted from x is the algebraic expression $x - 7$.

Reason (R): If $x - 7 = 3$, then $x = 10$.

D. Short Answer Questions ($4 \times 2 = 8$ marks)

1. If the cost of a notebook is ₹ x and the cost of a book is ₹ y , write an algebraic expression for the cost of 5 notebooks and 2 books.
2. For the equation $x + 7 = 3$, pick the solution from the values 3, 4, -4 and -7 . Show that the other values do not satisfy the equation.
3. A jowar roti plate costs ₹30 and a plate of pulao costs ₹50. If three friends eat 3 plates of jowar roti and 2 plates of pulao, how much do they pay?
4. The sum of two numbers is 40. If one number is 4 times the other, find the two numbers.

E. Long Answer Question ($1 \times 3 = 3$ marks)

1. Write an algebraic expression for each of the following:
 - (i) If 1 metre cloth costs x , then what is cost of 6 metre cloth?
 - (ii) If the cost of a notebook is x and the cost of a book is y , then what is the cost of 5 notebooks and 2 books?

(iii) If the length of a side of a regular pentagon is x cm, then what is the perimeter