

**DELHI PUBLIC SCHOOL, JAMMU**

**SESSION 2024-25**

**Assignment-4**

**Class: VI**

**Subject: Mathematics**

**Topic: Algebra & Data handling**

Read the instructions carefully and answer the following questions. Assertion and Reason Based Questions This type of reasoning questions consists of two statements; an assertion (statement of fact) and a reason (explanation for the assertion). You have to determine whether each statement is correct. If both the statements are correct, you have to determine whether the reason supports the assertion. There will be four answer choices for the possible outcomes and you have to select the correct one.

**Q1. Assertion (A):**  $5 \times x = 5x$

**Reason (R):** Literals obeys all the rules of addition, subtraction, multiplication and division.

- a) Both A and 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.

**Q2. Assertion (A) - The difference between maximum and minimum frequency is 9.**

**Reason (R) -**

<i>Blood groups</i>	<i>Number of students</i>
A	9
B	6
O	12
AB	3
Total	30

- a) Both A and 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.

**Q3. Assertion (A):** Using tally marks, 6 is represented as IIIII

**Reason (R):** Tally marks are usually marked in bunches of five.

- a) Both A and 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.

**Q4. Think a number. Multiply it by 6. Add 7 to the result. Subtract y from this result. What is the final result ?**

**Q5. Construct a frequency table for the following:**

**7,8,6,5,6,7,7,9,8,10,7,6,7,8,8,9,10,5,7,8,7,6.**

**Q6. The area of a rectangle is given by the product of its length and breadth. The length of a rectangle is two-third of its breadth. Find its area if its breadth is x cm.**

**Q7. The following table shows the number of Maruti cars sold by five dealers in a particular month. Represent the above information by a pictograph.**

Dealer	Saya	Bagga Links	D.D. Motors	Bhasin Motor	Competent Motors
Cars sold	60	40	20	15	10

**Q8. Case study based Question:-**

**In a class of 40 students, the number of boys is represented by 'b' and the number of girls by 'g'. The total number of students is given by the equation**

**Q1. If the number of boys is 18, write an equation .**

- (a)  $18 + b = 40$     (b)  $18 + g = 40$     (c)  $40 + g = 18$     (d)  $18 - g = 40$

**Q2. If there are twice as many boys as girls, find the number of boys and girls in the class using algebra.**

- (a)  $T = 2g$     (b)  $T = 2g + 3g$     (c)  $T = 3g$     (d)  $18 - g = 40$

**Q3. If 10 more girls join the class, write the new equation for the total number of students.**

- (a)  $b + g + 10 = 40$     (b)  $10 + g = 40$     (c)  $40 + g = 10$     (d)  $10 - g = 40$