

DELHI PUBLIC SCHOOL, JAMMU

SESSION 2024-25

Assignment-3

Class: VII

Subject: Maths

Topic: Rational Numbers

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): $4/0$ is a rational number.

Reason (R): a rational number cannot have its denominator as 0.

- 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): Rational numbers can be expressed as fractions.

Reason (R): the numbers that we return in the form of p/q where p and q are integers and q is not equal to zero are called rational numbers.

- 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): The standard form of rational number $-81/729$ is $-1/9$.

Reason (R): A rational number is said to be in standard form if its denominator is a positive integer and the numerator and denominator have no common factor other than 1.

- 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. Represent $-7/3$ on the number line

Q5. Find two rational numbers between $-3/13$ and $5/13$.

Q6. What should be subtracted from $-3/7$ to get $-2/7$?

Q7. Simplify:

$$(21/16 \times 12/9) + \{-3/8 \times (-12/9)\}$$

Q8. Aditya who is working in a multinational company earns ₹150000 per month. Out of his earnings he spend $1/10$ th on food items, $1/4$ th on shopping with family, $1/5$ th of remaining on education of his two kids and rest of his money he puts in his savings.

- i. How much money he spends on food items?
- ii. How much money he spend on shopping?
- iii. How much money was left with him after spending on food and shopping?
- iv. Calculate the amount spend by Aditya on education of children?