Chapter 2 Class 9 Polynomials - Assertion and Reasoning Worksheet 1 by teachoo

Chapter: Chapter 2 Class 9 Maths – Polynomials

Name: _____

School: _____

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Instructions:

For each question, two statements are given: Assertion (A) and Reason (R). Choose the correct option.

(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.

1. **Assertion (A):** The expression $\frac{1}{x} + 2$ is not a polynomial.

   Reason (R): A polynomial is an expression where the exponents of the variable must be non-negative integers.

2. **Assertion (A):** The degree of the polynomial $p(x) = 7$ is 0 .

   Reason (R): The degree of a non-zero constant polynomial is always zero.

3. **Assertion (A):** If $(x - 2)$ is a factor of $p(x) = x^2 + kx + 4$, then $k = -4$.

   Reason (R): According to the Factor Theorem, if $(x - a)$ is a factor of $p(x)$, then $p(a) = 0$.

4. **Assertion (A):** A quadratic polynomial can have at most two zeroes.

   Reason (R): The graph of a quadratic polynomial is a parabola which can intersect the x-axis at a maximum of two distinct points.

5. **Assertion (A):** The expression for the area of a rectangle with sides $(x + 5)$ and $(x - 3)$ is a quadratic polynomial.

   Reason (R): A polynomial of degree 2 is called a quadratic polynomial.

Important links

- Answer of this worksheet - https://www.teachoo.com/25600/5366/Assertion-Reasoning---Worksheet-1/category/Teachoo-Questions---Assertion-Reasoning/
- Full Chapter with Explanation, Activity, Worksheets and more – https://www.teachoo.com/subjects/cbse-maths/class-9th/ch2-9th-polynomials/
- Science Class 9 – https://www.teachoo.com/subjects/science/class-9/
- Maths Class 9- https://www.teachoo.com/subjects/cbse-maths/class-9th/

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