

Chapter 2 Class 9

Polynomials

- Assertion and Reasoning

Worksheet 2

by *teachoo*

Chapter: [Chapter 2 Class 9 Maths – Polynomials](#)

Name: _____

School: _____

Roll Number: _____

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 polynomial $p(x) = x^2 + 1$ has no real zeroes.

Reason (R): For any real number x , x^2 is always non-negative, so $x^2 + 1$ can never be zero.

2. **Assertion (A):** The value of 102×98 is 10004 .

Reason (R): The identity $(x + y)(x - y) = x^2 - y^2$ is used for such calculations.

3. **Assertion (A):** Every linear polynomial has one and only one zero.

Reason (R): The zero of a linear polynomial $ax + b$ is given by $x = -a/b$.

4. **Assertion (A):** The polynomial $x^3 - x$ has three zeroes: 0, 1, and -1 .

Reason (R): A cubic polynomial always has exactly three real zeroes.

5. **Assertion (A):** If $x + y + z = 0$, then $x^3 + y^3 + z^3 = 3xyz$.

Reason (R): $x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)$.

Important links

- Answer of this worksheet -<https://www.teachoo.com/25601/5366/Assertion-Reasoning---Worksheet-2/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/>

For more worksheets, ad-free videos and Sample Papers – subscribe to

Teachoo Black here - <https://www.teachoo.com/black/>