

Mathematics

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(Chapter – 2) (Polynomials)(Exemplar Problems)

(Class – IX)

Exercise 2.3

Question 12:

Find the zeroes of the polynomial:

$$p(x) = (x - 2)^2 - (x + 2)^2$$

Answer 12:

Given that: $p(x) = (x - 2)^2 - (x + 2)^2$

For zeroes, put $p(x) = 0$

$$\Rightarrow (x - 2)^2 - (x + 2)^2 = 0$$

$$\Rightarrow (x^2 - 4x + 4) - (x^2 + 4x + 4) = 0$$

$$\Rightarrow x^2 - 4x + 4 - x^2 - 4x - 4 = 0$$

$$\Rightarrow -8x = 0$$

$$\Rightarrow x = \frac{0}{-8} = 0$$

