

# Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: IX

Date: .....

Name: .....

ID No.....

## Multiple Choice Questions

Write the correct answer for each of the following:

1.  $(x+1)$  is a factor of the polynomial

(a)  $x^3 + x^2 - x + 1$

(b)  $x^3 + x^2 + x + 1$

(c)  $x^4 + x^3 + x^2 + 1$

(d)  $x^4 + 3x^3 + 3x^2 + x + 1$

Sol.

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2. Which of the following shows factor of  $p^2 - 27pq^3$

(a)  $p(1+3q)(1-3q+9q^2)$

(b)  $p(1+3q)(1+3q+9q^2)$

(c)  $p(1-3q)(1-3q-9q^2)$

(d)  $p(1-3q)(1+3q+9q^2)$

Sol.

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3. One of the factors of  $(25x^2 - 1) + (1 + 5x)^2$  is

(a)  $(5+x)$

(b)  $(5-x)$

(c)  $(5x-1)$

(d)  $10x$

Sol.

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4. The value of  $249^2 - 248^2$  is

(a)  $1^2$

(b) 477

(c) 487

(d) 497

Sol.

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