

Satish Chandra Memorial School

Time-35 mins

Class - VIII

FM-14

Class Test

Topic - We distribute, yet things multiply

1. The value of $16 \cdot 1^2 - 8 \cdot 9^2$ is (1)
a) 160 b) 180 c) 170 d) 175
2. Which expansion is correct? (1)
a) $(15x-6)^2 = 225x^2 - 36$ b) $(15x-6)^2 = 225x^2 - 180x + 36$
c) $(15x-6)^2 = 30x^2 - 36$ d) $(15x-6)^2 = 225x^2 + 180x + 36$
3. Which of the following is obtained by subtracting $x^2 - y^2$ from $y^2 - x^2$? (1)
a) $-2(x^2 - y^2)$ b) 0 c) $2(x^2 + y^2)$ d) $2(x^2 - y^2)$
4. Simplify a) $(x^2 - 3x + 2)(5x - 2) - (3x^2 + 4x - 5)(2x - 1)$ (2)
5. If $x - \frac{1}{x} = 9$ then find the value of $x^2 + \frac{1}{x^2}$? (2)
6. Using suitable algebraic identities find the product (2)
a) $(a+b+7)(a+b-7)$ (2)
b) $(2x+3y)(2x-3y)(4x^2+9y^2)$ (2)
7. Simplify $x^3(2x^2-3) - 3x^2(4x-x^3) - 7x^5$ and then find its value for $x=1$. (3)