



Nalanda College – Colombo 10

3rd Term Test

Mathematics – 2020

Grade - 8

Time – 01 hours

7 – Factors

(1) Fill in the blanks.

$$(i) \quad 10x + 8y = \square x 5x + \square x 4y = \square (\square +$$

$$(ii) \quad 12x + 20y = \square x 3x + \square x 5y = \square (\square +$$

$$(iii) \quad 10x - 25 = \square x 2x - \square x \square = \square (\square +$$

$$(iv) \quad 3y + 3 = \square x y + \square x 1 = \square (\square +$$

(2) Write as a product of two factors.

$$(i) \quad 5x + 15 = \dots\dots\dots (vii) \quad 12x - 18y = \dots\dots\dots$$

$$(ii) \quad 6x - 6 = \dots\dots\dots (viii) \quad mx - my = \dots\dots\dots$$

$$(iii) \quad 10 - 10x = \dots\dots\dots (ix) \quad xy - y = \dots\dots\dots$$

$$(iv) \quad 4x + 8 = \dots\dots\dots (x) \quad y^2 - y = \dots\dots\dots$$

$$(v) \quad 8y - 24 = \dots\dots\dots (xi) \quad 2x^2 - 6x = \dots\dots\dots$$

$$(vi) \quad 4x + 6y = \dots\dots\dots (xii) \quad 5x^2y - 10xy^2 = \dots\dots\dots$$

(3) Write as a product of two factors.

$$(i) \quad 3x + 6y + 9 = \dots\dots\dots (ii) \quad 12x + 15y + 6z = \dots\dots\dots$$

$$(iii) \quad 80 - 4 + 2b = \dots\dots\dots (iv) \quad 15 - 10x + 15y = \dots\dots\dots$$

$$(v) \quad 15x - 20y + 10 = \dots\dots\dots (vi) \quad xa + xb + xc = \dots\dots\dots$$

$$(vii) \quad xa^2 + xa - x = \dots\dots\dots (viii) \quad y^3 + y^2 + y = \dots\dots\dots$$

$$(ix) \quad a^2x - a^2y + a^2z + \dots\dots\dots (x) \quad 18x^2 - 12xy + 9xy^2 = \dots\dots\dots$$

(4) Fill in the blanks.

$$(i) \quad 3x + 12 = 3(\square + \square)$$

$$(ii) \quad 5x - \square = 5(\square - 4)$$

$$(iii) \quad \square - xy = x(x - \square)$$

$$(iv) \quad 4x - x + xy = x(\square - \square + \square)$$

$$(v) \quad y^2 - 5y + \square = \square(y - \square + 5)$$

$$(vi) \quad 12a - 18b + 6 = (2a - \square + \square)$$

$$(vii) \quad 4m^2 - \square - 12m = 4m(m - 3n - \square)$$

$$(viii) \quad 15p - 10q + 5 = (\square - \square + \square)$$



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