General instructions for Students: Whatever be the notes provided, everything must be copied in the Mathematics copy and then do the HOMEWORK in the same copy.

Factorising by grouping of terms

Exercise $-$ 11.2

1(i) $x^2 + xy - x - y$

Solution : $x^2 + xy - x - y = (x^2 + xy) - (x + y)$

$$= x(x + y) - 1(x + y)$$

$$= (x + y)(x - 1) \quad \textbf{Ans.}$$

4(ii) $3ax - 6ay - 8by + 4bx$

Solution : $3ax - 6ay - 8by + 4bx = (3ax - 6ay) + (4bx - 8by)$

$$= 3a(x - 2y) + 4b(x - 2y)$$

$$= (x - 2y)(3a + 4b) \quad \textbf{Ans.}$$

7(ii) $x^2 - x(a + 2b) + 2ab$

Solution : $x^2 - x(a + 2b) + 2ab = x^2 - ax - 2bx + 2ab$

$$= x(x - a) - 2b(x - a)$$

$$= (x - a)(x - 2b) \quad \textbf{Ans.}$$

10(i) $a^2b + ab^2 - abc - b^2c + axy + bxy$

Solution : $a^2b + ab^2 - abc - b^2c + axy + bxy = \left(a^2b + ab^2\right) - \left(abc + b^2c\right) + (axy + bxy)$

$$= ab(a + b) - bc(a + b) + xy(a + b)$$

$$= (a + b)(ab - bc + xy) \quad \textbf{Ans.}$$

HOMEWORK

EXERCISE $-$ 11.2

QUESTION NUMBERS : 2(ii),   3(ii),   5(ii),   8(i) and   11(i)