

(Learning Time 2 Hours)

## Factors

7.4 Writing an algebraic expression at a product of factors where one factor is a negative number

• When one factor is a negative number, the sign of each term of the other factor is opposite to that of the corresponding term in the original algebraic expression.

Let us consider the algebraic expression -2x + 6y. Here, 2 is a common factor of -2x and 6y. Therefore, -2x + 6y = 2 (-x + 3y)Since  $-2x = (-2) \times x$  and  $6y = (-2) \times (-3) \times y$ , (-2) is also a common factor of -2x and 6y.  $\therefore -2x + 6y = (-2) \times x + (-2) \times (-3) y$  = (-2) (x + (-3) y)= -2 (x - 3y)

• Study the page no: 85 and do the exercise 7.3

7.5 Writing an algebraic expression as a product of two factors where one factor is an algebraic term

Let us consider the algebraic expression pq + pr.

 $pq = p \times q$  $pr = p \times r$ 

Since p is a factor of each term of this expression, p is a common factor of the two terms.

 $\therefore pq + pr = p \times q + p \times r$ = p(q + r)

- First find the HCF of the terms of the algebraic expression
- Take the HCF as one factor and the expression which is obtained by dividing each term of the algebraic expression by the HCF as the other factor and write the algebraic expression as a product of these two factors.
- Study pages no: 86 and 87, do the exercise 7.4