COVID 19- WEEKLY SCHOOL- GRADE 9
3rd WEEK - FEBRUARY
Unit 6 - Factors of Algebraic Expressions

When factorizing algebraic expressions, we should consider the **highest common factor** and take it out from the brackets as given below.

Ex :-

- $3x + 12 = 3 (x + 4)$
- $8m + 12\ mn - 16\ mn^2 = 4m (2 + 3n - 4n^2)$
- $-4p + 2 - 6q = -2 (2p -1 + 3q)$

➢ Do the **review exercise** for more examples.

Factors of algebraic expressions with four terms

In this lesson, we expect to learn how to write an expression of the form **ax + bx + ay + by** as a product of two factors as **(a + b) (x + y).**

Ex :- (i) $ax + bx + ay + by$ (ii) $3x^2 - xy + 6xy - 2y^2$

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

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

     (iii) $-5a - 5 - 2ab - 2b$

        $= -5 (a + 1) -2b (a + 1)$

        $= (a + 1)(-5 - 2b)$

➢ Do the **exercise 6.1** for more examples.