Chapter 14

Factorisation

Identifying the signs for factoring trinomial:

Note:

Product with same signs:

Consider the following products

(i) $(x+2)(x+3)=x^2+5x+6$ (ii) $(x-2)(x-3)=x^2-5x+6$

Step (I):

The product $ab=B$ is positive.

Therefore, ‘a’ and ‘b’ will have the same sign, either plus or minus, depending on the sign of ‘A’ (The coefficient ox ‘x’).

In both (i) & (ii), the product $ab=B=6$ is positive.

Step (II):

Case (I):

If ‘A’ is positive, that is A > 0. Hence, both ‘a’ and ‘b’ are positive.

In (i) ‘A’ is 5, therefore positive, that is A > 0. Hence, both ‘a’ and ‘b’ are positive. So $a=2$ and $b=4$.

Case (II):

If ‘A’ is Negative, that is A < 0. Hence, both ‘a’ and ‘b’ are negative.

In (ii) ‘A’ is (-5), therefore negative, that is A < 0. Hence, both ‘a’ and ‘b’ are negative. So $a = -2$ and $b = -3$.