

Simple Factorin g

$$(x+a)(x+b) = x^2 + ax + bx + ab \\ = x^2 + (a+b)x + ab$$

You can use simple factoring
when there is a coefficient
of 1 in front of the x^2 .

eg. $y = x^2 + 2x + 1$ ✓

$y = \textcircled{2}x^2 + 2x + 1$ X Cannot use

Ex 1: Factor $0 = x^2 + 2x + 1$

$$\underline{1} + \underline{1} = 2$$

$$\underline{1} \times \underline{1} = 1$$

$$0 = (x+1)(x+1) = (x+1)^2$$

Ex 2: Factor $0 = x^2 - 3x - 10$

$$\underline{2} + \underline{-5} = -3$$

$$\underline{2} \times \underline{-5} = -10$$

$$0 = (x+2)(x-5)$$