10^{th} Maths - Chapter 4

This is Problem-1(ii) from Exercise 4.2
Find the roots of the following quadratic equations by factorisation:
$2x^2 + x - 6 = 0$
Solution:
$x = \frac{-b \pm \sqrt{b^2-4ac}}{2a}$
$x = \frac{-1 \pm \sqrt{1^2-4\times2\times-6}}{2\times2}$
$x = \frac{-1 \pm \sqrt{1-4-12}}{4}$
$x = \frac{-1 \pm \sqrt{49}}{4}$
$x = \frac{-1 \pm 7}{4}$
$x = \frac{-1+7}{4}$
$x = \frac{6}{4}$
$x = \frac{3}{2}$
OR
$x = \frac{-1-7}{4}$
$x = \frac{-8}{4}$
$x = -2$