Use the Quadratic Formula, 
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$
, with  $a = 1$ ,  $b = 5$ , and  $c = 2$ :

$$x = \frac{-5 \pm \sqrt{5^2 - 4(1)(2)}}{2 \cdot 1} = \frac{-5 \pm \sqrt{25 - 8}}{2} = \frac{-5 \pm \sqrt{17}}{2} = \frac{-5 \pm \sqrt{17}}{2}$$