

1 Using the quadratic formula, or otherwise, solve $3x^2 + x - 5 = 0$

[2 marks]

$$x = \frac{-1 \pm \sqrt{1^2 - 4(3)(-5)}}{2(3)}$$

(1)

$$= \frac{-1 \pm \sqrt{61}}{6}$$

$$= \frac{-1 - \sqrt{61}}{6} \quad \text{or} \quad \frac{-1 + \sqrt{61}}{6}$$

$$= -1.468... \quad \text{or} \quad 1.135...$$

Answer $-1.468... \text{ and } 1.135...$ (1)