1. The cubic equation

$$2x^3 - 3x^2 + 5x + 7 = 0$$

has roots α, β and γ.

Without solving the equation, determine the exact value of

(i) $\alpha^2 + \beta^2 + \gamma^2$

(3)

(ii) $\dfrac{3}{\alpha} + \dfrac{3}{\beta} + \dfrac{3}{\gamma}$

(3)

(iii) $(5 - \alpha)(5 - \beta)(5 - \gamma)$

(3)