1. The cubic equation

$$3x^3 + 5x^2 - 2x + 6 = 0$$

has roots α, β and γ.

Without solving the equation, find the cubic equation whose roots are $(2\alpha - 1)$, $(2\beta - 1)$ and $(2\gamma - 1)$, giving your answer in the form $pw^3 + qw^2 + rw + s = 0$, where p, q, r and s are integers.

(5)