1. $$y = 4x^3 - 7x^2 + 5x - 10$$

(a) Find in simplest form

 (i) $\dfrac{\mathrm{d}y}{\mathrm{d}x}$

 (ii) $\dfrac{\mathrm{d}^2 y}{\mathrm{d}x^2}$

(3)

(b) Hence find the exact value of x when $\dfrac{\mathrm{d}^2 y}{\mathrm{d}x^2} = 0$

(2)