



### Question One

$$a) \quad \frac{33.66 - 29.791}{53.94} = \frac{3.869}{53.94}$$

$$= 0.0717 \text{ (3 sig. figs.)}$$

$$b) \quad 3x^2$$

$$c) \quad x^2 = 5x \\ = (x+1)(x+5)$$

$$d) \quad 3x^{-1}$$

$$e) \quad 30x - \frac{2x-5}{2} = 6$$

$$60x - \frac{2x-5}{1} = 12$$

$$60x - 2x + 5 = 12$$

$$58x = 7$$

$$x = \frac{7}{58}$$



$$f. \quad x - 2y = 8 \quad (1)$$

$$2x + y = 1 \quad (2)$$

$$y = -2x + 1 \quad (3)$$

Sub (3) into (1)

$$x - 2(-2x + 1) = 8$$

$$x + 4x + 2 = 8$$

$$5x = 6$$

$$x = \frac{6}{5}$$

$$\frac{6}{5} - 2y = 8 \quad x = \frac{6}{5} \quad \& \quad y = -2x + 1$$