

$$\begin{aligned} 2) \quad & \frac{5.8^2 - 3.1^3}{3 \times 3.1 \times 5.8} \\ & = \frac{3.849}{53.94} \end{aligned}$$

$$= 0.071357\dots$$

$$\approx 0.0714 \text{ (3 sig fig.)}$$

$$\begin{aligned} 6) \quad & \text{if } y = x^3 + 2 \\ & y' = 3x^2 \end{aligned}$$

$$c) \quad x^2 = 5x$$

$$x^2 - 5x = 0$$

$$x(x - 5) = 0$$

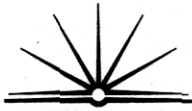
$$\therefore x = 0 \text{ or } 5$$

$$\begin{aligned} d) \quad & \text{if } y(x) = \frac{3}{x} \\ & F(x) = 3 \ln x \end{aligned}$$

$$\begin{aligned} & 3 \times \frac{1}{x} \\ & = 3 \ln x \end{aligned}$$

$$e) \quad 3x - \frac{2x - 5}{2} = 6$$

$$6x - 2x - 5 = 12$$



$$4x - 5 = 12$$

$$4x = 17$$

$$x = \frac{17}{4} \text{ or } 4\frac{1}{4}$$

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

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

$$2x - 4y = 16 \quad (1) \times 2 = (3)$$

$$-3y = 15 \quad (3) - (2)$$

$$y = -5$$

Sub in (1) $x - 2 \times 5 = 8$

$$x - 10 = 8$$

$$x = 18$$

Sub in (2) $2x + 5 = 1$

$$2x = -6$$

$$x = -3$$

Check 3-