

$$3. a) f(x) = x$$

$$F(x) = x(1-x) \Rightarrow x(1-x) = x$$

$$x - x^2 = x \Rightarrow x - x - x^2 = 0$$

$$-x^2 = 0$$

$$\boxed{x = 0}$$

$$\text{fixes } f = \{0\}$$

$$b) f(x) = 3x(1-x)$$

$$3x(1-x) = x \Rightarrow 3x - 3x^2 = x$$

$$3x - 3x^2 - x = 0$$

$$2x - 3x^2 = 0 \quad \div x$$

$$x(2 - 3x) = 0$$

$$\text{log of } \boxed{x=0} \text{ or } 2 - 3x = 0 \quad \left\{ \begin{array}{l} \Rightarrow 2 - 3x = 0 \Rightarrow 2 = 3x \\ \boxed{x = \frac{2}{3}} \end{array} \right.$$

$$\text{points } \boxed{\text{fixes } f = \left\{0, \frac{2}{3}\right\}}$$