

$$(h) \quad \cos x + 3y^2 \frac{dy}{dx} = 0$$

$$3y^2 \frac{dy}{dx} = -\cos x$$

$$\Rightarrow 3y^2 dy = -\cos x dx$$

$$\Rightarrow \int 3y^2 dy = -\int \cos x dx$$

$$y^3 = -\sin x + c$$

$$y^3 + \sin x = c$$

$$L) \quad yy' = x + 1, \quad y = 3 \text{ عند } x = 0$$

$$y \frac{dy}{dx} = x + 1$$

$$\Rightarrow y dy = (x + 1) dx$$

$$\int y dy = \int (x + 1) dx$$

$$\frac{y^2}{2} = \frac{x^2}{2} + x + c$$

$$\frac{9}{2} = c$$

$$\Rightarrow \frac{y^2}{2} = \frac{x^2}{2} + x + \frac{9}{2}$$

$$y^2 = x^2 + 2x + 9$$

$$y^2 = x^2 + 2x + 1 + 8$$

$$y^2 = (x + 1)^2 + 8$$