

$$f) g'(x) = \frac{1}{x+1} \quad f' = 5 \cos(x + 0.9273)$$

$$\frac{1}{x+1} = 5 \cos(x + 0.9273)$$

$$x = \cos^{-1}\left(\frac{1}{5(x+1)}\right) - 0.9273$$

$$x_0 = 0$$

$$x_1 = \cos^{-1}\left(\frac{1}{5(0+1)}\right) - 0.9273$$

$$= 0.4421$$

$$x_2 = \cos^{-1}\left(\frac{1}{5(0.4421+1)}\right) - 0.9273$$

$$= 0.5044$$

$$x_3 = 0.5102$$

$$x_4 = 0.5107$$

$$x_5 = 0.5107$$