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MAT NO - 18/ENG02/066

DEPT - Computer Eng

$$f(x) := \sqrt{5 - 5x^2}$$

$$g(x) := \sqrt{4 - x^2}$$



$$x := 0.50248$$

$$y := 1.9358$$

$$\left(\frac{d}{dx}f(x)\right) = -1.3$$

$$\left(\frac{d}{dx}g(x)\right) = -0.26$$

$$\theta_1 := \text{atan}\left(\frac{d}{dx}f(x)\right)$$

$$\theta_1 = -52.422 \text{ deg}$$

$$\theta_2 := \text{atan}\left(\frac{d}{dx}g(x)\right)$$

$$\theta_2 = -14.551 \text{ deg}$$

$$\text{Magnitude} := \theta_2 - \theta_1$$

$$\text{Magnitude} = 37.871 \text{ deg}$$