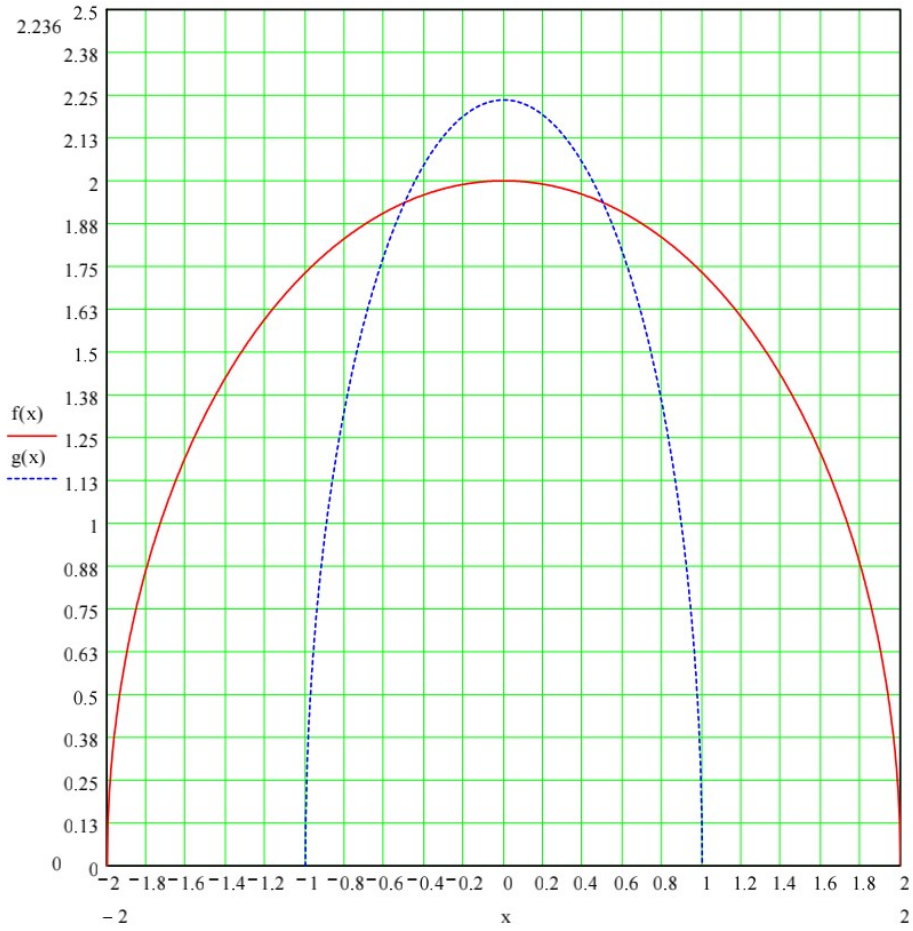
$f(x) := \sqrt{4 - x^2}$

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



$x^2 + y^2 = 4$

$5x^2 + y^2 = 5$

$y^2 = 4 - x^2$

$5x^2 + (4 - x^2) = 5$

$5x^2 + 4 - x^2 = 5$

$4x^2 = 1$

$x^2 = 1/4$

$x = \pm 1/2$

$y = \pm \sqrt{15}/2$

$\therefore$ Since $\tan\theta$ is for positive values of x & y,

$+ 1/2$ and $+ \sqrt{15}/2$

$\tan\theta = dy/dx$

$2x + 2y\, dy/dx = 0$

$dy/dx = -x/y$

when $x = +1/2$ and $y = +\sqrt{15}/2$

$dy/dx = -0.2582$

$10x + 2y\, dy/dx = 0$

$dy/dx = -5x/y$

when $x = +1/2$ and $y = +\sqrt{15}/2$

$dy/dx = -1.2910$

$$\tan\theta = \left| \frac{m_2 - m_1}{1 + m_2 m_1} \right|$$

$$= \left| \frac{-0.2582 + 1.2910}{1 + 0.3333} \right|$$

~~XXXXXXXX~~ $= 0.7746$

$\theta = \tan^{-1}(0.7746)$

$= $ ~~57.15°~~ $37.76°$