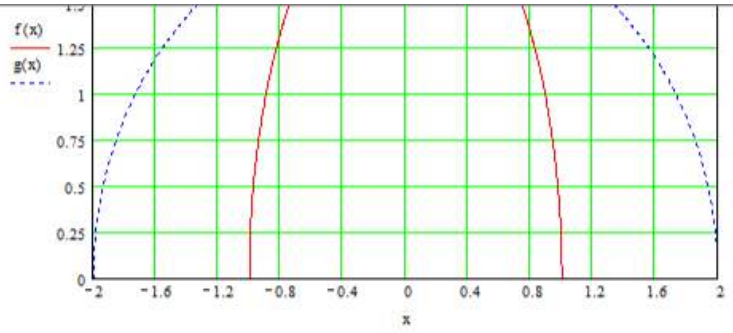


TRACE INTERCEPTS;

$x := 0.50051$

$y := 1.9364$

DIFFERENTIATING f(x);

$\frac{d}{dx} f(x) = -1.293$

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

$\theta x = -52.276\,\text{deg}$

DIFFERENTIATING g(x)

$\frac{d}{dx} g(x) = -0.258$

$\theta y := \operatorname{atan}\left(\frac{d}{dx} g(x)\right)$

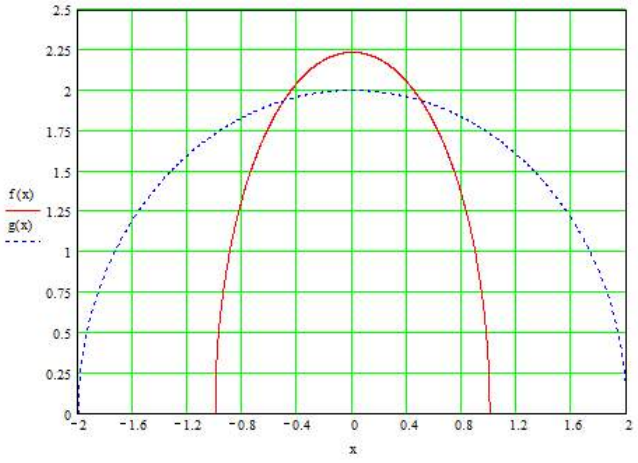
$\theta y = -14.493\,\text{deg}$

$\text{magnitude} := \theta x - \theta y$

$\text{magnitude} := 37.763\text{deg}$

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

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



OLAWOYIN SADEEQ BABALOLA

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MECHATRONICS ENGINEERING

TRACE INTERCEPTS;

$x := 0.50051$

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DIFFERENTIATING f(x);

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DIFFERENTIATING g(x)

$\frac{d}{dx} g(x) = -0.258$