

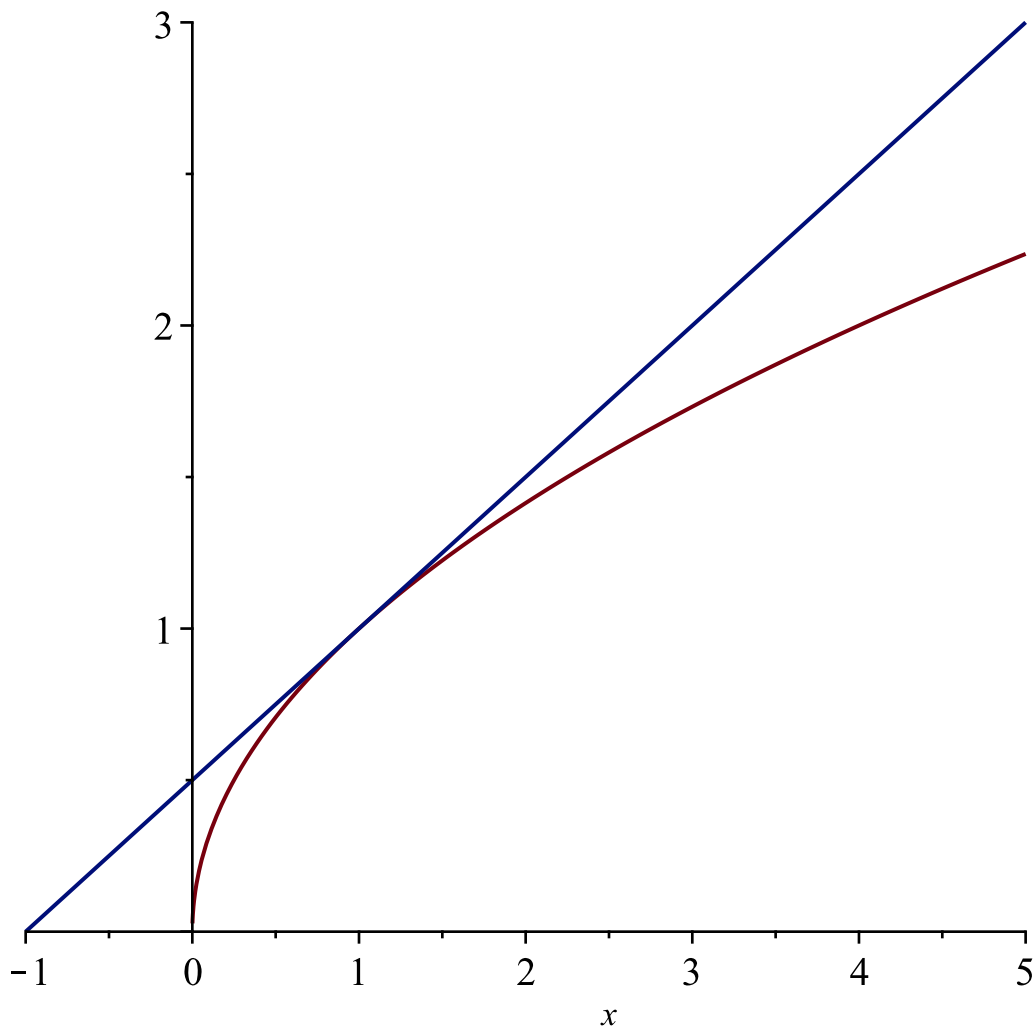
*with(plots) :*  
*f := x → √x*

$$f := x \mapsto \sqrt{x} \quad (1)$$

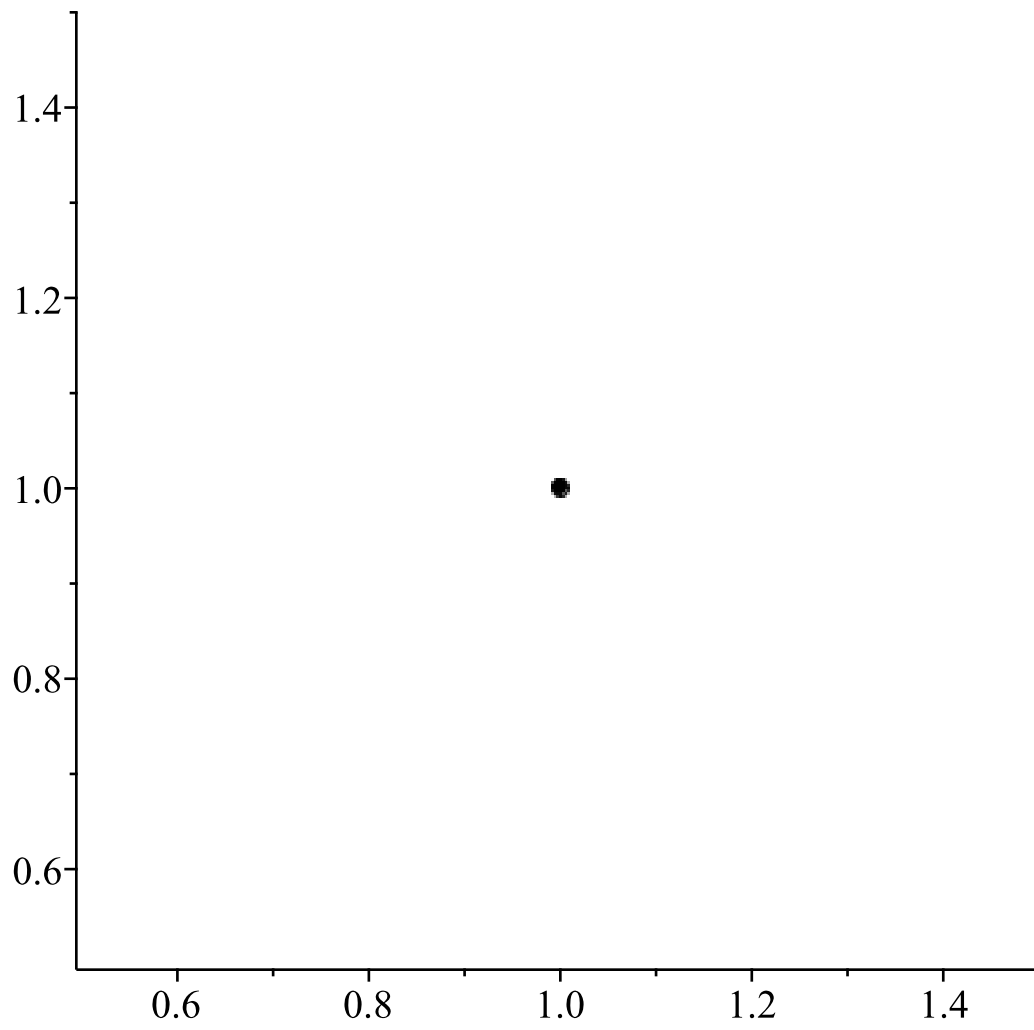
$$L := x \mapsto \frac{1}{2} \cdot (x - 1) + 1$$

$$L := x \mapsto \frac{x}{2} + \frac{1}{2} \quad (2)$$

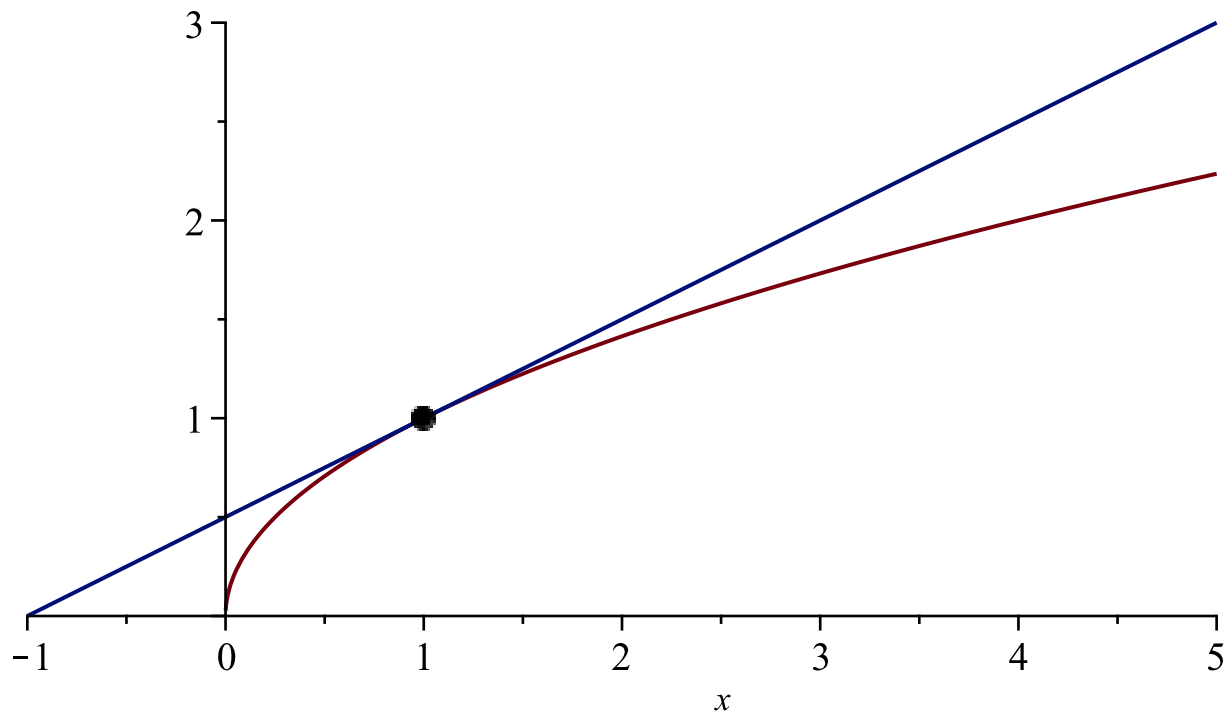
*myplot := plot([f(x), L(x)], x=-1..5)*



*mypoint := pointplot([1, 1], symbol=solidcircle, symbolsize=14)*



*display([myplot, mypoint])*



1.7 #4

$$\text{evalf}\left(1 - \frac{1}{\text{sqrt}(2)}\right)$$

0.2928932190

(3)

$$\text{evalf}\left(1 - \text{sqrt}\left(\frac{3}{2}\right)\right)$$

-0.224744872

(4)

$$\text{evalf}\left(\frac{.5}{3}\right)$$

0.1666666667

(5)

$f(x)$

$$\sqrt{x} \quad (6)$$

$$f := x \mapsto x^3 - 2 \cdot x + 6$$

$$f := x \mapsto x^3 - 2x + 6 \quad (7)$$

$$f(2)$$

$$10 \quad (8)$$

$$\text{solve}(f(x) = 10.2)$$

$$2.019764839, -1.009882419 + 1.029362668 I, -1.009882419 - 1.029362668 I \quad (9)$$

$$\text{solve}(f(x) = 9.8)$$

$$1.979754912, -0.9898774558 + 0.9693152906 I, -0.9898774558 - 0.9693152906 I \quad (10)$$

$$2 - 2.019764839$$

$$-0.019764839 \quad (11)$$

$$2 - 1.979754912$$

$$0.020245088 \quad (12)$$

$$f(2.0198)$$

$$10.20036000 \quad (13)$$

$$f(2.0197)$$

$$10.19933618 \quad (14)$$

$$\text{evalf}\left(\text{sqrt}\left(\frac{2300}{\text{Pi}}\right)\right)$$

$$27.05758189 \quad (15)$$

$$\text{evalf}\left(\text{sqrt}\left(\frac{2310}{\text{Pi}}\right)\right)$$

$$27.11633893 \quad (16)$$

$$\text{evalf}\left(\text{sqrt}\left(\frac{2290}{\text{Pi}}\right)\right)$$

$$26.99869699 \quad (17)$$

$$\text{abs}(27.05758189 - 27.11633893)$$

$$0.05875704 \quad (18)$$

$$\text{abs}(27.05758189 - 26.99869699)$$

$$0.05888490 \quad (19)$$