

$$eqn := x^3 + x + 3 = 5 + \epsilon$$

$$eqn := x^3 + x + 3 = 5 + \epsilon \quad (1)$$

`solve(eqn, x)`

$$\frac{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}}{6} \quad (2)$$

$$\begin{aligned} & - \frac{2}{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}}, \\ & - \frac{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}}{12} \\ & + \frac{1}{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}} \\ & + \frac{1}{2} \left( I \sqrt{3} \left( \frac{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}}{6} \right. \right. \\ & \left. \left. + \frac{2}{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}} \right) \right) \\ & - \frac{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}}{12} \\ & + \frac{1}{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}} \\ & - \frac{1}{2} \left( I \sqrt{3} \left( \frac{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}}{6} \right. \right. \\ & \left. \left. + \frac{2}{\left(216 + 108 \epsilon + 12 \sqrt{81 \epsilon^2 + 324 \epsilon + 336}\right)^{1/3}} \right) \right) \end{aligned}$$

`Re(%)`

Error, invalid input: Re expects 1 argument, but received 3

`evalf(sqrt(1.5))`

$$1.224744871 \quad (3)$$

`with(plots) :`

$$plot\left(\left[-x^2, x^2, x^2 \cdot \sin\left(\frac{\text{Pi}}{x}\right)\right], x=-2..2, y=-5..5, \text{discont}=\text{true}\right)$$

