



solve $x e^{-x^2} = 2 e^{-x^2}$



Input interpretation :

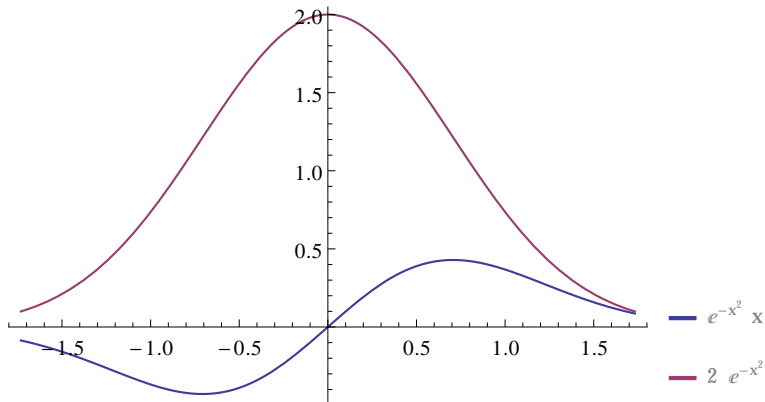
solve

$$x e^{-x^2} = 2 e^{-x^2}$$

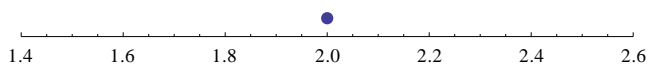
Result:

$$x = 2$$

Plot:



Number line:





diff $x e^{-x^2}$ when $x = 1$



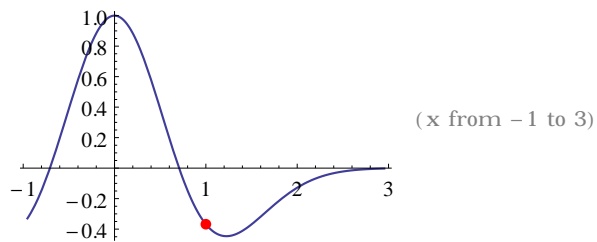
Input interpretation :

$$\frac{\partial(x e^{-x^2})}{\partial x} \text{ where } x = 1$$

Result:

$$-\frac{1}{e} \approx -0.367879$$

Plot:





int x e^{^-x^2} from 0 to 1



Definite integral:

$$\int_0^1 x e^{-x^2} dx = \frac{e-1}{2e} \approx 0.31606$$

Visual representation of the integral:

