$$c := c$$

$$c := c$$

$$f := l \rightarrow int \left(\left(\frac{1}{l} \right) \cdot \exp(-c \cdot (r^2 + (l - r)^2)), r = 0 ..l \right)$$

$$f := l \rightarrow \int_0^l \frac{e^{-c(r^2 + (l - r)^2)}}{l} dr$$

$$\frac{1}{2} \frac{erf\left(\frac{1}{2} \sqrt{c} l \sqrt{2} \right) \sqrt{\pi} e^{-\frac{1}{2} c l^2} \sqrt{2}}{l \sqrt{c}}$$

$$\Rightarrow p := x \rightarrow diff(1 - \exp(-c \cdot x^2), x)$$

$$p := x \rightarrow \frac{\partial}{\partial x} (1 - e^{-c \cdot x^2})$$

$$\Rightarrow p(x)$$

$$2 c x e^{-c \cdot x^2}$$

$$\Rightarrow p_k := int(p(l) \cdot f(l), l = 0 ..infinity)$$

$$p_k := \frac{1}{9} \pi \sqrt{3}$$

$$\Rightarrow evalf(p_k)$$

$$0.6045997883$$

$$(1)$$