Integrate[x^2*Exp[-2*x],{x,0,Infinity}]

Definite integral:

More digits | Step-by-step solution

$$\int_0^\infty x^2 \exp(-2\,x)\,dx = \frac{1}{4} \approx 0.25000$$

Indefinite integral:

Approximate form | Step-by-step solution

$$\int x^2 \exp(-2\,x)\,dx = -\frac{1}{4}\,e^{-2\,x}\left(2\,x^2+2\,x+1\right) + \text{constant}$$