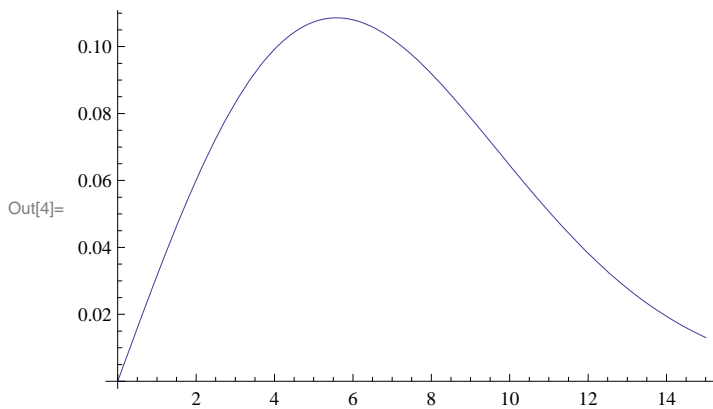


$$\text{In[2]:= Weibull} = \frac{\pi V}{2 Vm^2} e^{-\frac{\pi V^2}{4 Vm^2}} ;$$

**In[4]:= Vm = 7; Plot[Weibull, {V, 0, 15}]**



$$\int_0^{\infty} \text{Weibull} \, dV = 1 ;$$

$$\int_0^{\infty} \text{Weibull} V \, dV = Vm ;$$

$$\int_0^{\infty} \text{Weibull} V^3 \, dV = \frac{6 Vm^3}{\pi} ;$$

**In[12]:= Approx = FullSimplify [ (  $\int_0^{a Vm} \text{Weibull} V^3 \, dV$  ) /  $\frac{6 Vm^3}{\pi}$  ]**

$$\text{Out[12]=} -\frac{1}{6} a e^{-\frac{a^2 \pi}{4}} (6 + a^2 \pi) + \text{Erf} \left[ \frac{a \sqrt{\pi}}{2} \right]$$

**In[17]:= Plot[Approx, {a, 0, 5}, GridLines -> Automatic]**

