"i is", 5,

" ----------"

$$g := t \to e^{t}$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{4 \ln(y\sim)}{y\sim^{3}}\right], [1, \infty], ["Continuous", "PDF"]\right]$$

"l and u", 0, ∞

"g(x)", e^{x}, "base", $4 x e^{-2x}$, "GammaRV(2,2)"

"f(x)", $\frac{4 \ln(x)}{x^{3}}$

"F(x)", $-\frac{-x^{2} + 2 \ln(x) + 1}{x^{2}}$

"IDF(x,s)", $\left[\left[s \to \frac{1}{\sqrt{\frac{s-1}{\text{LambertW}((s-1) e^{-1})}}}\right], [0, 1], ["Continuous", "IDF"]\right]$

"S(x)", $\frac{2 \ln(x) + 1}{x^{2}}$

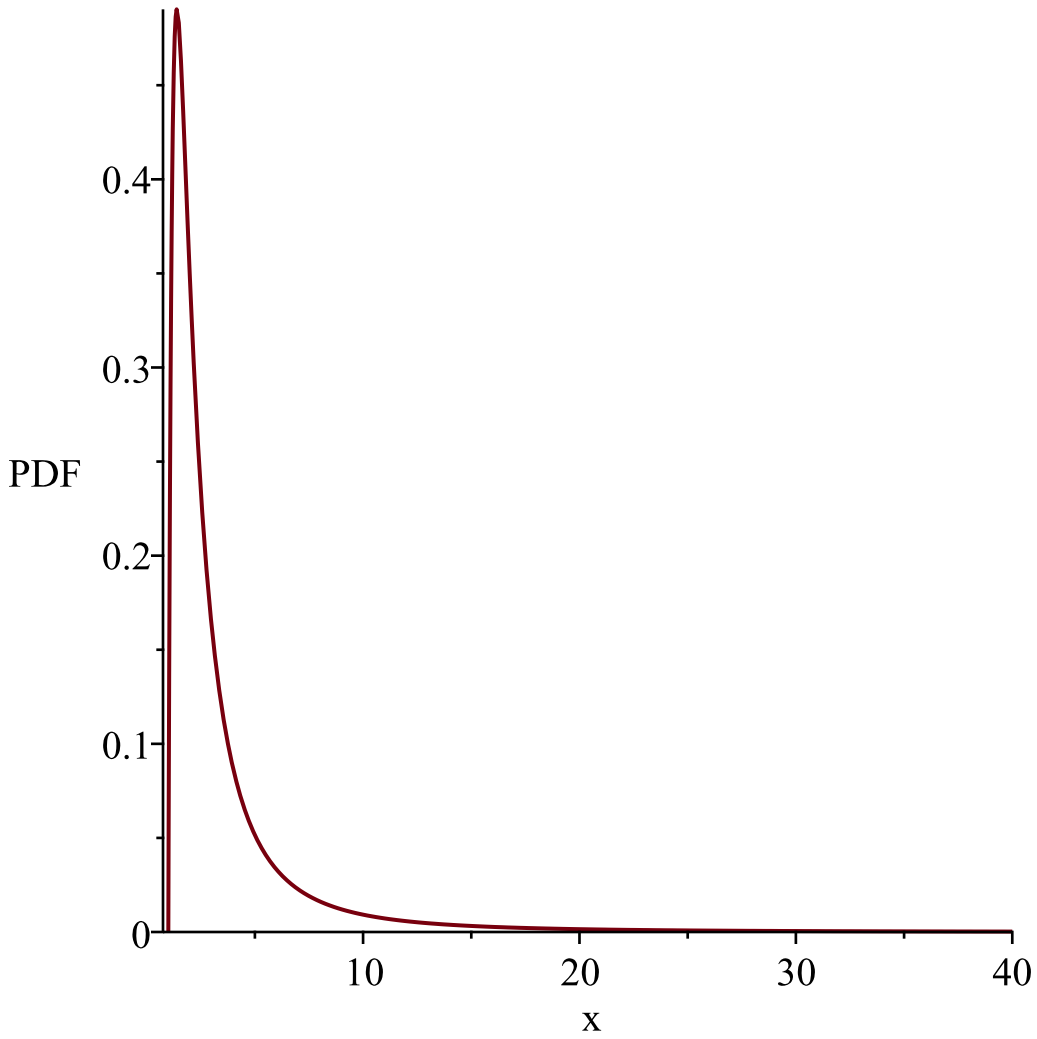
"h(x)", $\frac{4 \ln(x)}{x (2 \ln(x) + 1)}$

"mean and variance", 4, ∞

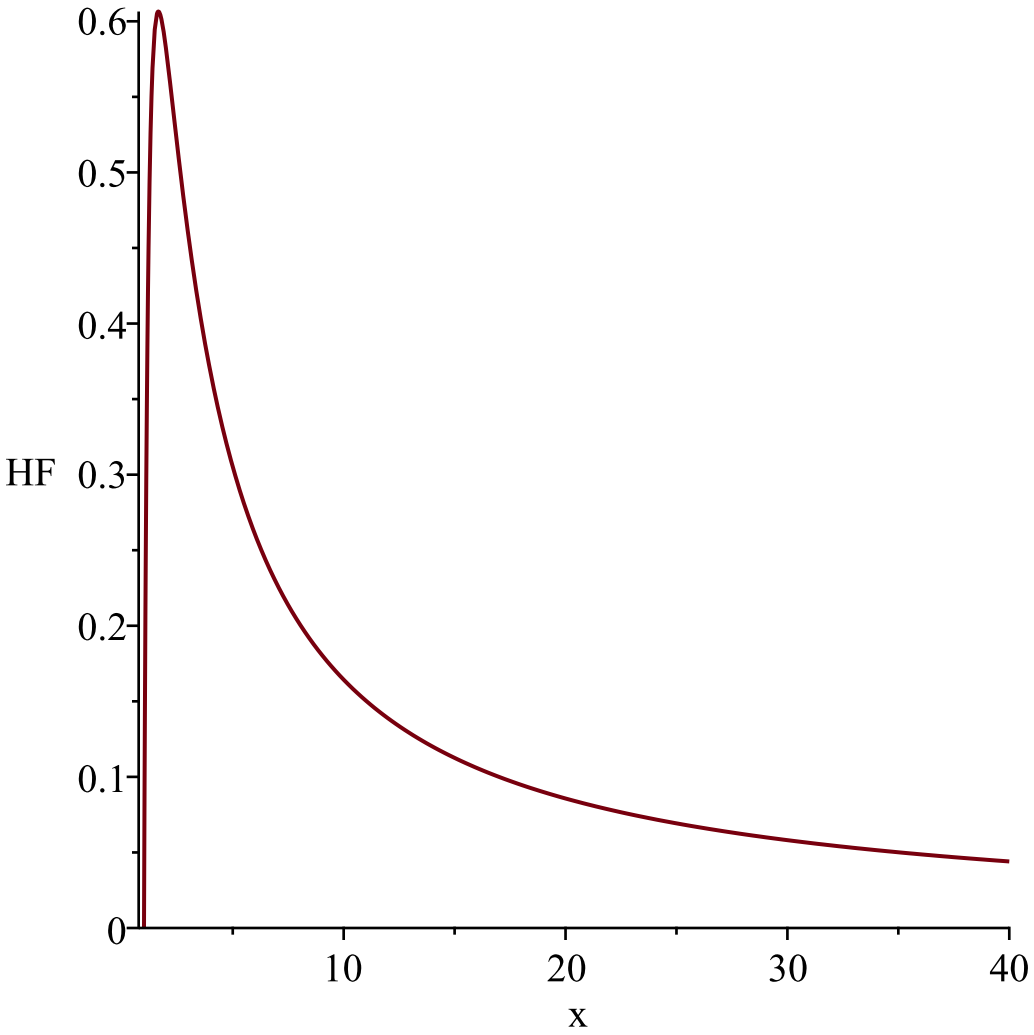
"MF did not work"

"MGF", $\int_{1}^{\infty} \frac{4 e^{t x} \ln(x)}{x^{3}} dx$

WARNING(PlotDist): Low value provided by user, 0
is less than minimum support value of random variable
1
Resetting low to RV's minimum support value



WARNING(PlotDist): Low value provided by user, 0
is less than minimum support value of random variable
1
Resetting low to RV's minimum support value




```
4\,{\frac {\ln  \left( x \right) }{{x}^{3}}}
```

"i is", 6,

" ----------"

$$g := t \to \ln(t)$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to 4\, e^{2\,y\sim - 2\, e^{y\sim}}\right], [-\infty, \infty], ["Continuous", "PDF"]\right]$$

"l and u", 0, ∞

"g(x)", $\ln(x)$, "base", $4\, x\, e^{-2\,x}$, "GammaRV(2,2)"

"f(x)", $4\, e^{2\,x - 2\, e^{x}}$

"F(x)", $1 - 2\, e^{x - 2\, e^{x}} - e^{-2\, e^{x}}$

"IDF(x,s)", $\left[\left[s \to RootOf\left(\_Z + \ln(2) - \ln\left(1 - e^{-2\, e^{-Z}} - s\right) - 2\, e^{-Z}\right)\right], [0, 1], ["Continuous", "IDF"]\right]$

"S(x)", $2\, e^{x - 2\, e^{x}} + e^{-2\, e^{x}}$

$$\text{"h(x)"},\ \frac{4\,e^{2x-2e^{x}}}{2\,e^{x-2e^{x}}+e^{-2e^{x}}}$$

Warning, computation interrupted

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