

"i is", 18,

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

$$g:=t\rightarrow \frac{1}{\operatorname{arcsinh}(t+1)}$$

$$l:=0$$

$$u:=\infty$$

$$Temp:=\left[\left[y\rightsquigarrow \frac{4\left(-1+\sinh \left(\frac{1}{y\sim }\right)\right)e^{2-2\sinh \left(\frac{1}{y\sim }\right)}\cosh \left(\frac{1}{y\sim }\right)}{y\sim ^2}\right],\left[0,\frac{1}{\ln (1+\sqrt{2})}\right],\right.\\ \left.["Continuous","PDF"]\right]$$

"l and u", 0, ∞

$$\text{"g(x)", }\frac{1}{\operatorname{arcsinh}(x+1)}, \text{"base", }4\,x\,e^{-2x}, \text{"GammaRV(2,2)"}$$

$$\text{"f(x)", }\frac{4\left(-1+\sinh \left(\frac{1}{x}\right)\right)e^{2-2\sinh \left(\frac{1}{x}\right)}\cosh \left(\frac{1}{x}\right)}{x^2}$$

$$\text{"F(x)", }e^{-\frac{\left(\frac{2}{e^x}x-2e^{\frac{1}{x}}x+e^{\frac{1}{x}}-x\right)e^{-\frac{1}{x}}}{x}}\left(e^{\frac{2}{x}}-e^{\frac{1}{x}}-1\right)$$

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

$$\text{"S(x)", }-e^{-\frac{\left(\frac{2}{e^x}x-2e^{\frac{1}{x}}x-e^{\frac{1}{x}}-x\right)e^{-\frac{1}{x}}}{x}}+e^{-\left(\frac{2}{e^x}-2e^{\frac{1}{x}}-1\right)e^{-\frac{1}{x}}}+e^{-\frac{\left(\frac{2}{e^x}x-2e^{\frac{1}{x}}x+e^{\frac{1}{x}}-x\right)e^{-\frac{1}{x}}}{x}}+1$$

$$\text{"h(x)", }-\left(4\left(-1+\sinh \left(\frac{1}{x}\right)\right)e^{2-2\sinh \left(\frac{1}{x}\right)}\cosh \left(\frac{1}{x}\right)\right)/\\ \left(x^2\left(e^{-\frac{\left(\frac{2}{e^x}x-2e^{\frac{1}{x}}x-e^{\frac{1}{x}}-x\right)e^{-\frac{1}{x}}}{x}}-e^{-\left(\frac{2}{e^x}-2e^{\frac{1}{x}}-1\right)e^{-\frac{1}{x}}}-e^{-\frac{\left(\frac{2}{e^x}x-2e^{\frac{1}{x}}x+e^{\frac{1}{x}}-x\right)e^{-\frac{1}{x}}}{x}}\right.\right.$$

))
-1))

"mean and variance did not work"

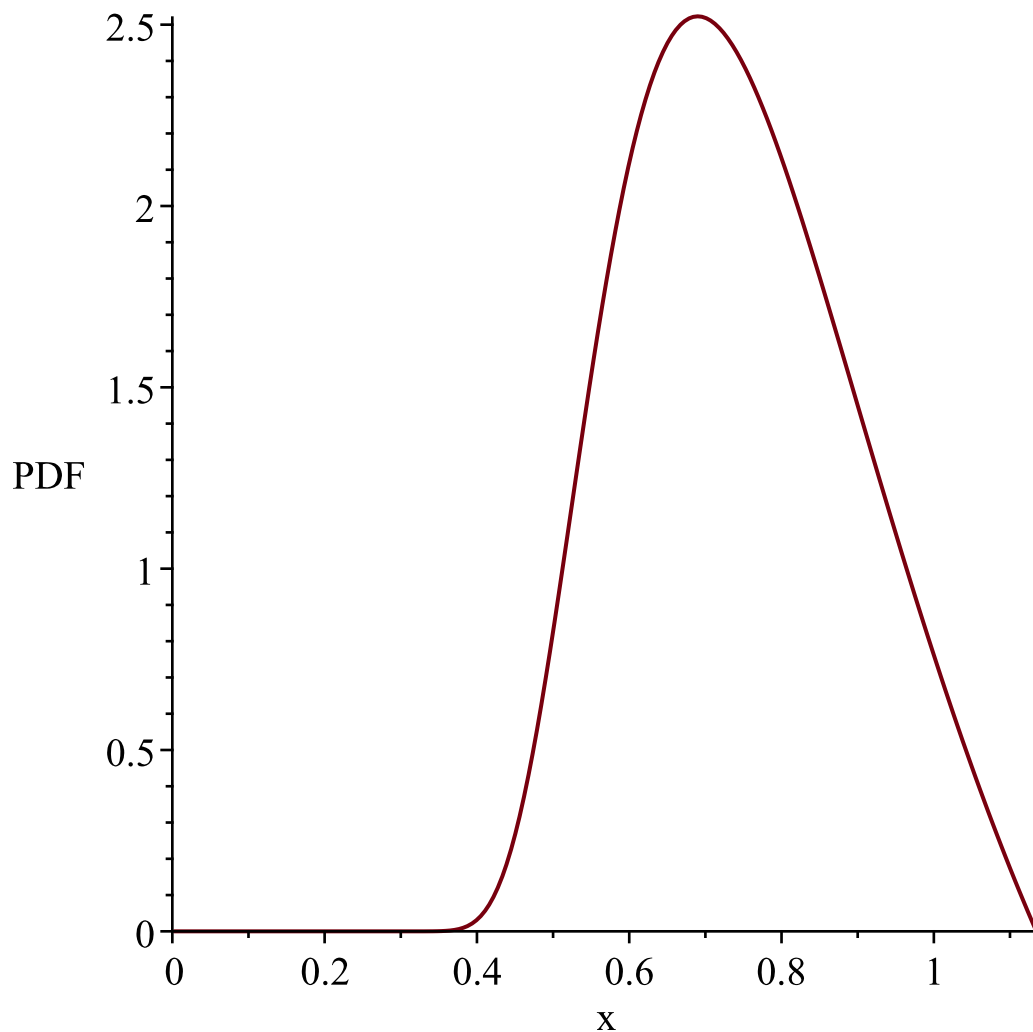
$$mf := \int_0^{\frac{1}{\ln(1+\sqrt{2})}} \frac{4 x^{\sim} \left(-1 + \sinh\left(\frac{1}{x}\right) \right) e^{2 - 2 \sinh\left(\frac{1}{x}\right)} \cosh\left(\frac{1}{x}\right)}{x^2} dx$$

"MGF did not work"

*WARNING(PlotDist): High value provided by user, 40
is greater than maximum support value of the random*

variable, $\frac{1}{\ln(1+\sqrt{2})}$

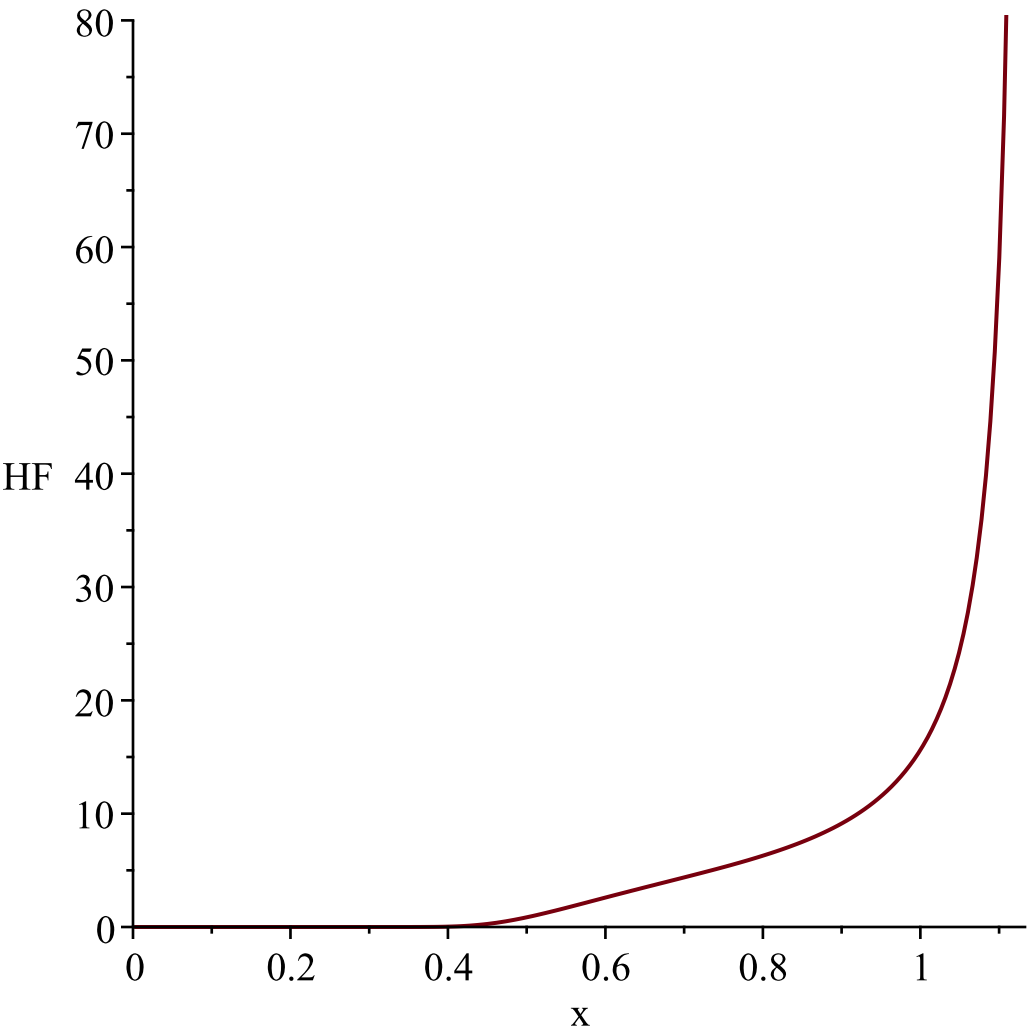
Resetting high to RV's maximum support value



*WARNING(PlotDist): High value provided by user, 40
is greater than maximum support value of the random*

$$\text{variable, } \frac{1}{\ln(1 + \sqrt{2})}$$

Resetting high to RV's maximum support value



```
4\,{\frac { \left( -1+\sinh \left( {x}^{-1} \right) \right) {\rm e}^
{2-2\,\sinh \left( {x}^{-1} \right) }}{\cosh \left( {x}^{-1}
\right) }}{
{x}^2}}
```

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"is", 19,
" -----
-----"
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$$g := t \rightarrow \frac{1}{\operatorname{csch}(t)} + 1$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y \rightarrow \frac{4 \operatorname{arccsch}\left(\frac{1}{y-1}\right)}{\sqrt{y^2-2 y+2} \left(y-1+\sqrt{y^2-2 y+2}\right)^2} \right], [1, \infty], ["Continuous",$$

"PDF"]

"l and u", 0, ∞

"g(x)", $\frac{1}{\operatorname{csch}(x)} + 1$, "base", $4 x e^{-2x}$, "GammaRV(2,2)"

"f(x)", $\frac{4 \operatorname{arccsch}\left(\frac{1}{x-1}\right)}{\sqrt{x^2-2x+2} \left(x-1+\sqrt{x^2-2x+2}\right)^2}$

"F(x)", $4 \left(\int_1^x \frac{\operatorname{arccsch}\left(\frac{1}{t-1}\right)}{\sqrt{t^2-2t+2} \left(t-1+\sqrt{t^2-2t+2}\right)^2} dt \right)$

Error, (in solve) cannot solve expressions with int(arccsch(1/(t-1))/((t^2-2*t+2)^(1/2)*(t-1+(t^2-2*t+2)^(1/2))^2), t = 1 .. x) for x

