"i is", 11,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to -\frac{\sqrt{\frac{1}{\operatorname{arctanh}(y\sim)^3}}\, e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(y\sim)-3)^2}{\operatorname{arctanh}(y\sim)}}}{\sqrt{\pi}\,(y\sim^2-1)} \right], [0, 1], ["Continuous", "PDF"] \right]$$

"l and u", 0, ∞

"g(x)", $\tanh(x)$, "base", $\sqrt{\frac{1}{\pi x^3}}\, e^{-\frac{1}{9}\frac{(x-3)^2}{x}}$, "InverseGaussianRV(2,3)"

"f(x)", $-\frac{\sqrt{\frac{1}{\operatorname{arctanh}(x)^3}}\, e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(x)-3)^2}{\operatorname{arctanh}(x)}}}{\sqrt{\pi}\,(x^2-1)}$

"S(x)", $\frac{\sqrt{\pi} + \int_0^x \frac{\sqrt{\frac{1}{\operatorname{arctanh}(t)^3}}\, e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(t)-3)^2}{\operatorname{arctanh}(t)}}}{t^2-1}\, dt}{\sqrt{\pi}}$

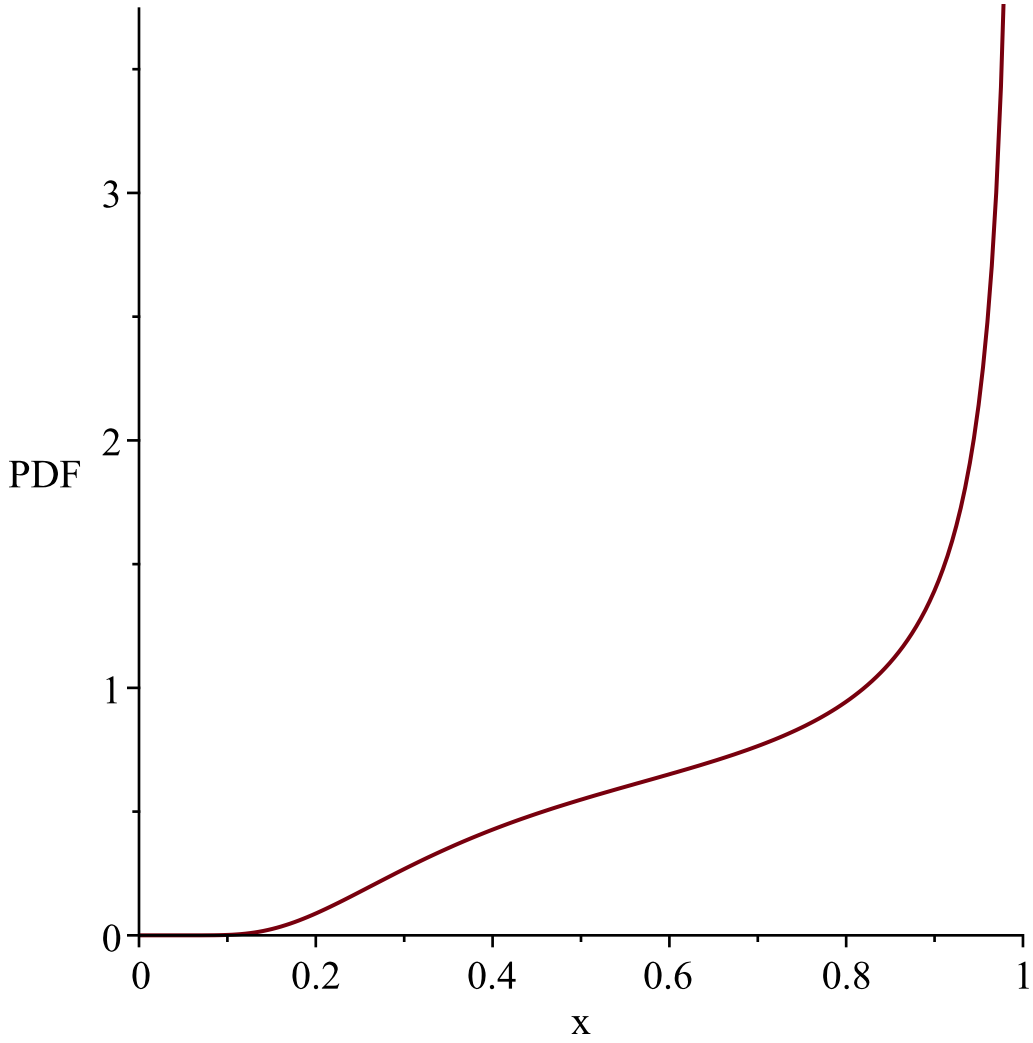
"h(x)", $-\frac{\sqrt{\frac{1}{\operatorname{arctanh}(x)^3}}\, e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(x)-3)^2}{\operatorname{arctanh}(x)}}}{(x^2-1)\left(\sqrt{\pi} + \int_0^x \frac{\sqrt{\frac{1}{\operatorname{arctanh}(t)^3}}\, e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(t)-3)^2}{\operatorname{arctanh}(t)}}}{t^2-1}\, dt\right)}$

"mean and variance", $-\frac{\int_0^1 \frac{x\, e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(x)-3)^2}{\operatorname{arctanh}(x)}}}{\operatorname{arctanh}(x)^{3/2}(x^2-1)}\, dx}{\sqrt{\pi}}$,

$$-\frac{\left(\int_0^1 \frac{x\,e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(x)-3)^2}{\operatorname{arctanh}(x)}}}{\operatorname{arctanh}(x)^{3/2}\left(x^2-1\right)}\,dx\right)^2\sqrt{\pi}+\left(\int_0^1 \frac{x^2\,e^{-\frac{1}{9}\frac{(\operatorname{arctanh}(x)-3)^2}{\operatorname{arctanh}(x)}}}{\operatorname{arctanh}(x)^{3/2}\left(x^2-1\right)}\,dx\right)\pi}{\pi^{3/2}}$$

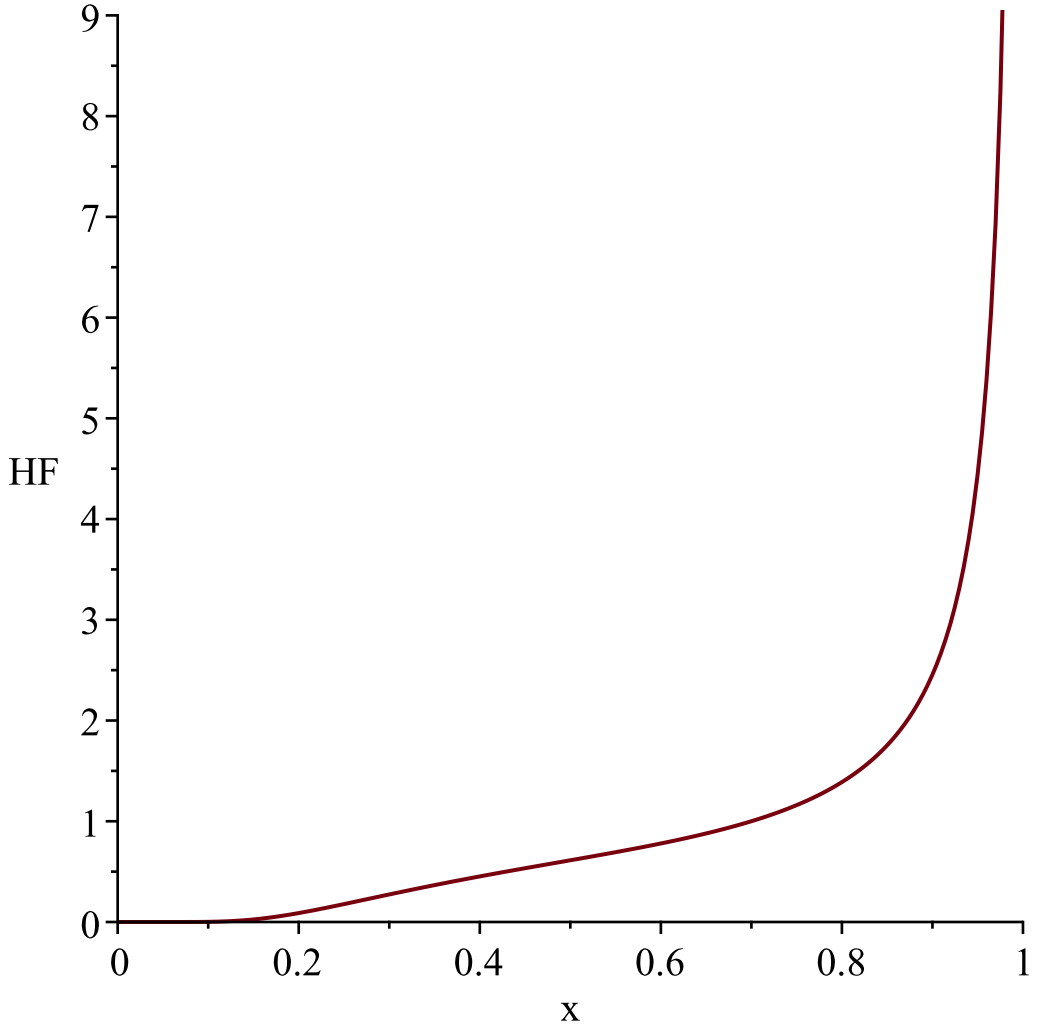
WARNING(PlotDist): High value provided by user, 40 *is greater than maximum support value of the random variable*, 1

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 variable*, 1

Resetting high to RV's maximum support value




```
-{\frac {\sqrt { \left( {\rm arctanh} \left(x\right) \right) ^
{-3}}}{
\sqrt {\pi} \left( {x}^{2}-1 \right) }{{\rm e}^{-1/9\,{\frac {
\left(
{\rm arctanh} \left(x\right)-3 \right) ^{2}}{{\rm arctanh} \left
(x
\right)}}}}}
```

"i is", 12,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{\text{signum}(y\sim)\sqrt{\frac{1}{\text{arcsinh}(y\sim)}}\, e^{-\frac{1}{9}\frac{(\text{arcsinh}(y\sim)-3)^2}{\text{arcsinh}(y\sim)}}}{\text{arcsinh}(y\sim)\sqrt{\pi}\sqrt{y\sim^2+1}}\right], [0, \infty], ["\text{Continuous}",\right.$$

"PDF"]

"l and u", 0, ∞

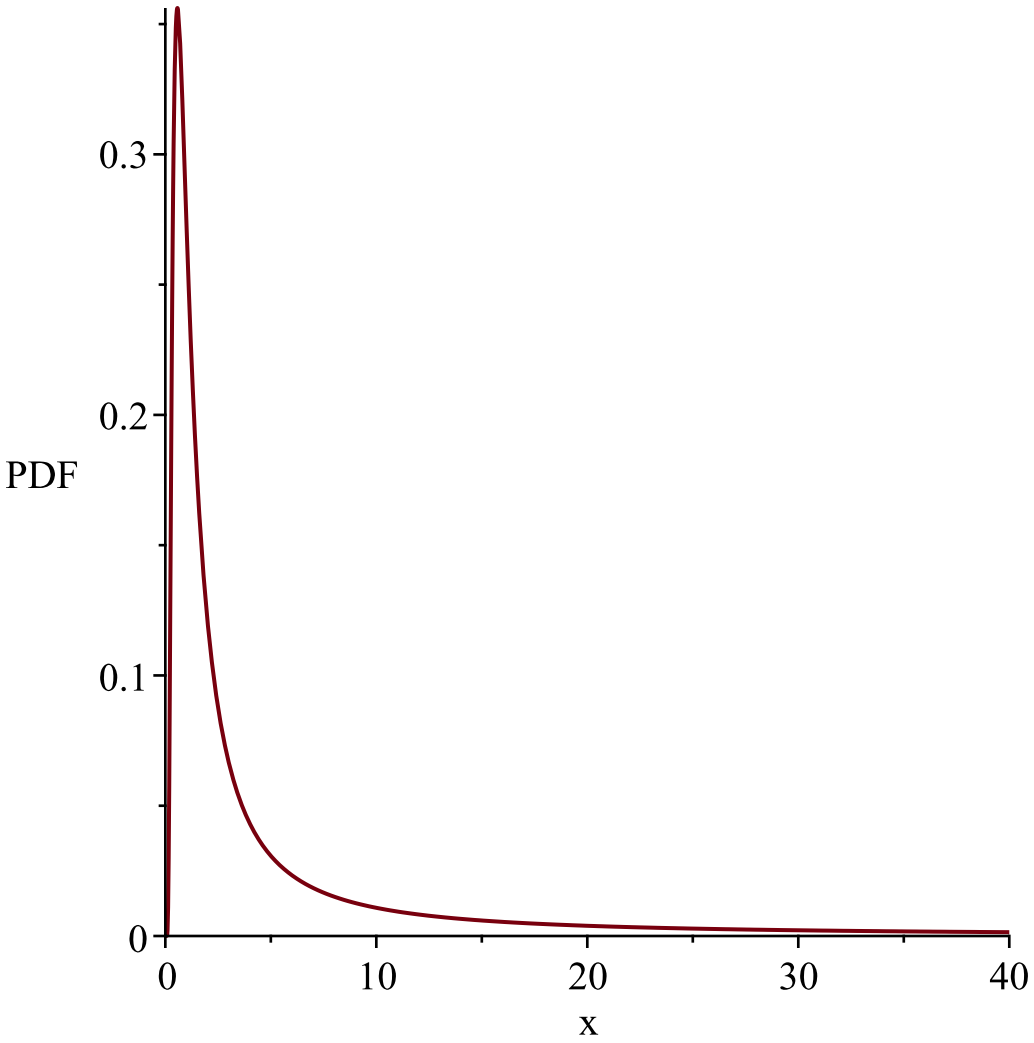
"g(x)", $\sinh(x)$, "base", $\sqrt{\frac{1}{\pi x^3}}\, e^{-\frac{1}{9}\frac{(x-3)^2}{x}}$, "InverseGaussianRV(2,3)"

"f(x)", $\frac{\operatorname{signum}(x)\sqrt{\frac{1}{\operatorname{arcsinh}(x)}}\, e^{-\frac{1}{9}\frac{(\operatorname{arcsinh}(x)-3)^2}{\operatorname{arcsinh}(x)}}}{\operatorname{arcsinh}(x)\sqrt{\pi}\sqrt{x^2+1}}$

"S(x)", $-\frac{-\sqrt{\pi}+\int_0^x \frac{\operatorname{signum}(t)\sqrt{\frac{1}{\operatorname{arcsinh}(t)}}\, e^{-\frac{1}{9}\frac{(\operatorname{arcsinh}(t)-3)^2}{\operatorname{arcsinh}(t)}}}{\operatorname{arcsinh}(t)\sqrt{t^2+1}}\,dt}{\sqrt{\pi}}$

"h(x)", $-\frac{\operatorname{signum}(x)\sqrt{\frac{1}{\operatorname{arcsinh}(x)}}\, e^{-\frac{1}{9}\frac{(\operatorname{arcsinh}(x)-3)^2}{\operatorname{arcsinh}(x)}}}{\operatorname{arcsinh}(x)\sqrt{x^2+1}\left(-\sqrt{\pi}+\int_0^x \frac{\operatorname{signum}(t)\sqrt{\frac{1}{\operatorname{arcsinh}(t)}}\, e^{-\frac{1}{9}\frac{(\operatorname{arcsinh}(t)-3)^2}{\operatorname{arcsinh}(t)}}}{\operatorname{arcsinh}(t)\sqrt{t^2+1}}\,dt\right)}$

"mean and variance", ∞, *undefined*



Warning, computation interrupted

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