$$filename := \text{"C:/LatexOutput/GeneralizedParetoGen.tex"}$$

$$\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$$

"i is", 1,

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

$$g := t \to t^2$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{1}{2}\ \frac{\left(a\sim\sqrt{y\sim} + a\sim b\sim + c\right) b\sim^{c}\left(\sqrt{y\sim} + b\sim\right)^{-c-1} e^{-a\sim\sqrt{y\sim}}}{\sqrt{y\sim}}\right], [0, \infty],\right.$$

$$\left.["\text{Continuous}", "\text{PDF}"]\right]$$

"l and u", 0, ∞

"g(x)", x^2, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

$$\text{"f(x)"}, \frac{1}{2}\ \frac{\left(a\sim\sqrt{x} + a\sim b\sim + c\right) b\sim^{c}\left(\sqrt{x} + b\sim\right)^{-c-1} e^{-a\sim\sqrt{x}}}{\sqrt{x}}$$

"i is", 2,

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

$$g := t \to \sqrt{t}$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to 2\left(a\sim y\sim^2 + a\sim b\sim + c\right)\left(y\sim^2 + b\sim\right)^{-c-1} b\sim^{c} e^{-a\sim y\sim^2} y\sim\right], [0, \infty],\right.$$

$$\left.["\text{Continuous}", "\text{PDF}"]\right]$$

"l and u", 0, ∞

"g(x)", $\sqrt{x}$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

$$\text{"f(x)"}, 2\left(a\sim x^2 + a\sim b\sim + c\right)\left(x^2 + b\sim\right)^{-c-1} b\sim^{c} e^{-a\sim x^2} x$$

"i is", 3,

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

$$g := t \to \frac{1}{t}$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{(a\sim b\sim y\sim + c\,y\sim + a\sim)\; b\sim^{c} \left(\frac{b\sim y\sim + 1}{y\sim}\right)^{-c} e^{-\frac{a\sim}{y\sim}}}{(b\sim y\sim + 1)\; y\sim^{2}}\right], [0,\ \infty], [\text{"Continuous"}, \text{"PDF"}]\right]$$

"l and u", 0, ∞

"g(x)", $\frac{1}{x}$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{(a\sim b\sim x + c\,x + a\sim)\; b\sim^{c} \left(\frac{b\sim x + 1}{x}\right)^{-c} e^{-\frac{a\sim}{x}}}{(b\sim x + 1)\; x^{2}}$

"i is", 4,

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

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

$l := 0$

$u := \infty$

$$Temp := \left[[y\sim \to (a\sim \tan(y\sim) + a\sim b\sim + c)\; b\sim^{c} (\tan(y\sim) + b\sim)^{-c-1} e^{-a\sim \tan(y\sim)} (1 + \tan(y\sim)^{2})], \left[0, \frac{1}{2}\,\pi\right], [\text{"Continuous"}, \text{"PDF"}]\right]$$

"l and u", 0, ∞

"g(x)", $\arctan(x)$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $(a\sim \tan(x) + a\sim b\sim + c)\; b\sim^{c} (\tan(x) + b\sim)^{-c-1} e^{-a\sim \tan(x)} (1 + \tan(x)^{2})$

"i is", 5,

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

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

$l := 0$

$u := \infty$

$$Temp := [[y\sim \to (a\sim \ln(y\sim) + a\sim b\sim + c)\; b\sim^{c} (\ln(y\sim) + b\sim)^{-c-1} y\sim^{-a\sim-1}], [1,\ \infty], [\text{"Continuous"}, \text{"PDF"}]]$$

"l and u", 0, ∞

"g(x)", e^{x}, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $(a\sim \ln(x) + a\sim b\sim + c)\; b\sim^{c} (\ln(x) + b\sim)^{-c-1} x^{-a\sim-1}$

"i is", 6,

" ----------

----------"

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \left(a\sim e^{y\sim} + a\sim b\sim + c\right)\left(e^{y\sim} + b\sim\right)^{-c-1} b\sim^{c} e^{-a\sim e^{y\sim} + y\sim}\right], [-\infty, \infty], \right.$$
$$\left.["\text{Continuous}", "\text{PDF}"]\right]$$

"l and u", 0, ∞

$$"g(x)", \ln(x), "\text{base}", \left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}, "\text{GeneralizedParetoRV(a,b,c)}"$$

$$"f(x)", \left(a\sim e^{x} + a\sim b\sim + c\right)\left(e^{x} + b\sim\right)^{-c-1} b\sim^{c} e^{-a\sim e^{x} + x}$$

"i is", 7,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to -\left(a\sim \ln(y\sim) - a\sim b\sim - c\right) b\sim^{c} \left(-\ln(y\sim) + b\sim\right)^{-c-1} y\sim^{a\sim - 1}\right], [0, 1], \right.$$
$$\left.["\text{Continuous}", "\text{PDF}"]\right]$$

"l and u", 0, ∞

$$"g(x)", e^{-x}, "\text{base}", \left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}, "\text{GeneralizedParetoRV(a,b,c)}"$$

$$"f(x)", -\left(a\sim \ln(x) - a\sim b\sim - c\right) b\sim^{c} \left(-\ln(x) + b\sim\right)^{-c-1} x^{a\sim - 1}$$

"i is", 8,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \left(e^{y\sim} a\sim b\sim + c\, e^{y\sim} + a\sim\right) e^{-\left(y\sim e^{y\sim} + a\sim\right) e^{-y\sim} + c y\sim}\left(e^{y\sim} b\sim + 1\right)^{-c-1} b\sim^{c}\right], [-\infty, \right.$$
$$\left.\infty], ["\text{Continuous}", "\text{PDF}"]\right]$$

"l and u", 0, ∞

$$"g(x)", -\ln(x), "\text{base}", \left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}, "\text{GeneralizedParetoRV(a,b,c)}"$$

$$"f(x)", \left(e^{x} a\sim b\sim + c\, e^{x} + a\sim\right) e^{-\left(x e^{x} + a\sim\right) e^{-x} + c x}\left(e^{x} b\sim + 1\right)^{-c-1} b\sim^{c}$$

"i is", 9,

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

$$g := t \to \ln(t + 1)$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \left(a\sim e^{y\sim} + a\sim b\sim - a\sim + c\right)\, b\sim^{c}\, \left(e^{y\sim} - 1 + b\sim\right)^{-c-1}\, e^{-a\sim e^{y\sim} + a\sim + y\sim}\right], [0,\ \infty],\ ["\text{Continuous}", "\text{PDF}"]\right]$$

"l and u", 0, ∞

"g(x)", $\ln(x+1)$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $\left(a\sim e^{x} + a\sim b\sim - a\sim + c\right)\, b\sim^{c}\, \left(e^{x} - 1 + b\sim\right)^{-c-1}\, e^{-a\sim e^{x} + a\sim + x}$

"i is", 10,

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

$$g := t \to \frac{1}{\ln(t+2)}$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[\left[y\sim \to \frac{\left(a\sim e^{\frac{1}{y\sim}} + a\sim b\sim - 2\, a\sim + c\right)\, b\sim^{c}\, \left(e^{\frac{1}{y\sim}} - 2 + b\sim\right)^{-c-1}\, e^{-\frac{a\sim y\sim e^{\frac{1}{y\sim}} - 2\, a\sim y\sim - 1}{y\sim}}}{y\sim^{2}}\right], \left[0,\ \frac{1}{\ln(2)}\right],\ ["\text{Continuous}", "\text{PDF}"]\right]\right]$$

"l and u", 0, ∞

"g(x)", $\frac{1}{\ln(x+2)}$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{\left(a\sim e^{\frac{1}{x}} + a\sim b\sim - 2\, a\sim + c\right)\, b\sim^{c}\, \left(e^{\frac{1}{x}} - 2 + b\sim\right)^{-c-1}\, e^{-\frac{a\sim x e^{\frac{1}{x}} - 2\, a\sim x - 1}{x}}}{x^{2}}$

"i is", 11,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to\right.\right.$$

$$-\frac{(a\sim \operatorname{arctanh}(y\sim)+a\sim b\sim+c)\, b\sim^{c}\,(\operatorname{arctanh}(y\sim)+b\sim)^{-c-1}\, e^{-a\sim \operatorname{arctanh}(y\sim)}}{y\sim^{2}-1}\Bigg], [0, 1],$$

$$["Continuous", "PDF"]\Bigg]$$

$$"l \text{ and } u", 0, \infty$$

$$"g(x)", \tanh(x), "base", \left(a\sim+\frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}, "GeneralizedParetoRV(a,b,c)"$$

$$"f(x)", -\frac{(a\sim \operatorname{arctanh}(x)+a\sim b\sim+c)\, b\sim^{c}\,(\operatorname{arctanh}(x)+b\sim)^{-c-1}\, e^{-a\sim \operatorname{arctanh}(x)}}{x^{2}-1}$$

"i is", 12,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \Bigg[\Bigg[y\sim \to \frac{(a\sim \operatorname{arcsinh}(y\sim)+a\sim b\sim+c)\, b\sim^{c}\,(\operatorname{arcsinh}(y\sim)+b\sim)^{-c-1}\, e^{-a\sim \operatorname{arcsinh}(y\sim)}}{\sqrt{y\sim^{2}+1}}\Bigg],$$

$$[0, \infty], ["Continuous", "PDF"]\Bigg]$$

$$"l \text{ and } u", 0, \infty$$

$$"g(x)", \sinh(x), "base", \left(a\sim+\frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}, "GeneralizedParetoRV(a,b,c)"$$

$$"f(x)", \frac{(a\sim \operatorname{arcsinh}(x)+a\sim b\sim+c)\, b\sim^{c}\,(\operatorname{arcsinh}(x)+b\sim)^{-c-1}\, e^{-a\sim \operatorname{arcsinh}(x)}}{\sqrt{x^{2}+1}}$$

"i is", 13,

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

$$g := t \to \operatorname{arcsinh}(t)$$

$$l := 0$$

$$u := \infty$$

$$Temp := [[y\sim \to (a\sim \sinh(y\sim)+a\sim b\sim+c)\, b\sim^{c}\,(\sinh(y\sim)+b\sim)^{-c-1}\, e^{-a\sim \sinh(y\sim)} \cosh(y\sim)],$$

$$[0, \infty], ["Continuous", "PDF"]]$$

$$"l \text{ and } u", 0, \infty$$

$$"g(x)", \operatorname{arcsinh}(x), "base", \left(a\sim+\frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}, "GeneralizedParetoRV(a,b,c)"$$

$$"f(x)", (a\sim \sinh(x)+a\sim b\sim+c)\, b\sim^{c}\,(\sinh(x)+b\sim)^{-c-1}\, e^{-a\sim \sinh(x)} \cosh(x)$$

"i is", 14,

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

$$g := t \to \operatorname{csch}(t+1)$$
$$l := 0$$
$$u := \infty$$

$$Temp := \left[\left[y\sim \right.\right.$$
$$\left.\left. \to \frac{1}{\sqrt{y\sim^2+1}\ |y\sim|}\left((a\sim \operatorname{arccsch}(y\sim) + a\sim b\sim - a\sim + c)\ b\sim^{c}\ (-1+\operatorname{arccsch}(y\sim) + b\sim)^{-c-1}\ e^{-a\sim(-1+\operatorname{arccsch}(y\sim))}\right)\right], \left[0, \frac{2}{e-e^{-1}}\right], \text{["Continuous", "PDF"]}\right]$$

"l and u", 0, ∞

"g(x)", $\operatorname{csch}(x+1)$, "base", $\left(a\sim + \frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$,
"GeneralizedParetoRV(a,b,c)"

"f(x)",
$$\frac{(a\sim \operatorname{arccsch}(x) + a\sim b\sim - a\sim + c)\ b\sim^{c}\ (-1+\operatorname{arccsch}(x)+b\sim)^{-c-1}\ e^{-a\sim(-1+\operatorname{arccsch}(x))}}{\sqrt{x^2+1}\ |x|}$$

"i is", 15,
" ----------"

$$g := t \to \operatorname{arccsch}(t+1)$$
$$l := 0$$
$$u := \infty$$

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

"l and u", 0, ∞

"g(x)", $\operatorname{arccsch}(x+1)$, "base", $\left(a\sim + \frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$,
"GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{1}{\sinh(x)^2\ (b\sim\sinh(x) - \sinh(x) + 1)}\left((a\sim + a\sim b\sim \sinh(x) - a\sim \sinh(x)\right.$

$$+ c\sinh(x))\, b\sim^{c}\left(\frac{b\sim\sinh(x) - \sinh(x) + 1}{\sinh(x)}\right)^{-c} e^{\frac{a\sim(\sinh(x)-1)}{\sinh(x)}}\cosh(x)\Bigg)$$

"i is", 16,

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

$$g := t \to \frac{1}{\tanh(t+1)}$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{1}{y\sim^{2}-1}\left(\left(a\sim \operatorname{arctanh}\left(\frac{1}{y\sim}\right) + a\sim b\sim - a\sim + c\right) b\sim^{c}\left(-1 + \operatorname{arctanh}\left(\frac{1}{y\sim}\right) + b\sim\right)^{-c-1} e^{-a\sim\left(-1+\operatorname{arctanh}\left(\frac{1}{y\sim}\right)\right)}\right)\right], \left[1, \frac{e + e^{-1}}{e - e^{-1}}\right], \text{["Continuous", "PDF"]}\right]$$

"l and u", 0, ∞

"g(x)", $\frac{1}{\tanh(x+1)}$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$,

"GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{1}{x^{2}-1}\left(\left(a\sim \operatorname{arctanh}\left(\frac{1}{x}\right) + a\sim b\sim - a\sim + c\right) b\sim^{c}\left(-1 + \operatorname{arctanh}\left(\frac{1}{x}\right) + b\sim\right)^{-c-1} e^{-a\sim\left(-1+\operatorname{arctanh}\left(\frac{1}{x}\right)\right)}\right)$

"i is", 17,

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

$$g := t \to \frac{1}{\sinh(t+1)}$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{1}{\sqrt{y\sim^{2}+1}\,|y\sim|}\left(\left(a\sim \operatorname{arcsinh}\left(\frac{1}{y\sim}\right) + a\sim b\sim - a\sim + c\right) b\sim^{c}\left(-1 + \operatorname{arcsinh}\left(\frac{1}{y\sim}\right) + b\sim\right)^{-c-1} e^{-a\sim\left(-1+\operatorname{arcsinh}\left(\frac{1}{y\sim}\right)\right)}\right)\right], \left[0, \frac{2}{e - e^{-1}}\right], \text{["Continuous", "PDF"]}\right]$$

"l and u", 0, ∞

"g(x)", $\frac{1}{\sinh(x+1)}$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$,

"GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{1}{\sqrt{x^2+1}\ |x|}\left(\left(a\sim \operatorname{arcsinh}\left(\frac{1}{x}\right)+a\sim b\sim-a\sim+c\right) b\sim^{c}\left(-1+\operatorname{arcsinh}\left(\frac{1}{x}\right)+b\sim\right)^{-c}\right.$

$\left.{}^{-1}\mathrm{e}^{-a\sim\left(-1+\operatorname{arcsinh}\left(\frac{1}{x}\right)\right)}\right)$

"i is", 18,

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

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

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \to \frac{1}{y\sim^{2}}\left(\left(a\sim \sinh\left(\frac{1}{y\sim}\right)+a\sim b\sim-a\sim+c\right) b\sim^{c}\left(-1+\sinh\left(\frac{1}{y\sim}\right)+b\sim\right)^{-c}\right.\right.$$

$$\left.\left.{}^{-1}\mathrm{e}^{-a\sim\left(-1+\sinh\left(\frac{1}{y\sim}\right)\right)}\cosh\left(\frac{1}{y\sim}\right)\right)\right], \left[0, \frac{1}{\ln\left(1+\sqrt{2}\right)}\right], \left["\text{Continuous}", "\text{PDF}"\right]\right]$$

"l and u", 0, ∞

"g(x)", $\frac{1}{\operatorname{arcsinh}(x+1)}$, "base", $\left(a\sim+\frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c}\mathrm{e}^{-a\sim x}$,

"GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{1}{x^2}\left(\left(a\sim \sinh\left(\frac{1}{x}\right)+a\sim b\sim-a\sim+c\right) b\sim^{c}\left(-1+\sinh\left(\frac{1}{x}\right)+b\sim\right)^{-c}\right.$

$\left.{}^{-1}\mathrm{e}^{-a\sim\left(-1+\sinh\left(\frac{1}{x}\right)\right)}\cosh\left(\frac{1}{x}\right)\right)$

"i is", 19,

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

$$g := t \to \frac{1}{\operatorname{csch}(t)} + 1$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[y\sim \right.\right.$$

$$\left.\to \frac{1}{\sqrt{y\sim^{2}-2\,y\sim+2}}\left(\left(a\sim \operatorname{arccsch}\left(\frac{1}{y\sim-1}\right)+a\sim b\sim\right.\right.\right.$$

$$+c\Big)\, b\sim^{c}\left(\operatorname{arccsch}\left(\frac{1}{y\sim-1}\right)+b\sim\right)^{-c-1} e^{-a\sim \operatorname{arccsch}\left(\frac{1}{y\sim-1}\right)}\Bigg],\ [1,\ \infty],\ [\text{"Continuous"},\ \text{"PDF"}]\Bigg]$$

"l and u", 0, ∞

"g(x)", $\frac{1}{\operatorname{csch}(x)}+1$, "base", $\left(a\sim+\frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$,
"GeneralizedParetoRV(a,b,c)"

"f(x)",

$$\frac{\left(a\sim \operatorname{arccsch}\left(\frac{1}{x-1}\right)+a\sim b\sim+c\right) b\sim^{c}\left(\operatorname{arccsch}\left(\frac{1}{x-1}\right)+b\sim\right)^{-c-1} e^{-a\sim \operatorname{arccsch}\left(\frac{1}{x-1}\right)}}{\sqrt{x^2-2x+2}}$$

"i is", 20,
" ----------"

$$g := t\to \tanh\left(\frac{1}{t}\right)$$
$$l := 0$$
$$u := \infty$$

$$Temp := \Bigg[\Bigg[y\sim\to$$

$$-\frac{(\operatorname{arctanh}(y\sim)\ a\sim b\sim+c\operatorname{arctanh}(y\sim)+a\sim)\ b\sim^{c}\left(\frac{\operatorname{arctanh}(y\sim)\ b\sim+1}{\operatorname{arctanh}(y\sim)}\right)^{-c} e^{-\frac{a\sim}{\operatorname{arctanh}(y\sim)}}}{(\operatorname{arctanh}(y\sim)\ b\sim+1)\operatorname{arctanh}(y\sim)^2\left(y\sim^2-1\right)}\Bigg],$$

$[0, 1], [\text{"Continuous"}, \text{"PDF"}]\Bigg]$

"l and u", 0, ∞

"g(x)", $\tanh\left(\frac{1}{x}\right)$, "base", $\left(a\sim+\frac{c}{x+b\sim}\right)\left(1+\frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $-\frac{(\operatorname{arctanh}(x)\ a\sim b\sim+c\operatorname{arctanh}(x)+a\sim)\ b\sim^{c}\left(\frac{\operatorname{arctanh}(x)\ b\sim+1}{\operatorname{arctanh}(x)}\right)^{-c} e^{-\frac{a\sim}{\operatorname{arctanh}(x)}}}{(\operatorname{arctanh}(x)\ b\sim+1)\operatorname{arctanh}(x)^2\left(x^2-1\right)}$

"i is", 21,
" ----------"

$$g := t \to \operatorname{csch}\left(\frac{1}{t}\right)$$

$$l := 0$$

$$u := \infty$$

$$Temp := \left[\left[\left[y\sim \to \frac{(\operatorname{arccsch}(y\sim)\ a\sim b\sim + c\ \operatorname{arccsch}(y\sim) + a\sim)\ b\sim^{c} \left(\frac{\operatorname{arccsch}(y\sim)\ b\sim + 1}{\operatorname{arccsch}(y\sim)}\right)^{-c} e^{-\frac{a\sim}{\operatorname{arccsch}(y\sim)}}}{(\operatorname{arccsch}(y\sim)\ b\sim + 1)\ \sqrt{y\sim^2 + 1}\ \operatorname{arccsch}(y\sim)^2\ |y\sim|}\right], [0, \infty], ["\text{Continuous}", "\text{PDF}"]\right]\right]$$

"l and u", 0, ∞

"g(x)", $\operatorname{csch}\left(\frac{1}{x}\right)$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$, "GeneralizedParetoRV(a,b,c)"

"f(x)", $\frac{(\operatorname{arccsch}(x)\ a\sim b\sim + c\ \operatorname{arccsch}(x) + a\sim)\ b\sim^{c} \left(\frac{\operatorname{arccsch}(x)\ b\sim + 1}{\operatorname{arccsch}(x)}\right)^{-c} e^{-\frac{a\sim}{\operatorname{arccsch}(x)}}}{(\operatorname{arccsch}(x)\ b\sim + 1)\ \sqrt{x^2 + 1}\ \operatorname{arccsch}(x)^2\ |x|}$

"i is", 22,

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

$$g := t \to \operatorname{arccsch}\left(\frac{1}{t}\right)$$

$$l := 0$$

$$u := \infty$$

$$Temp := [[y\sim \to (a\sim \sinh(y\sim) + a\sim b\sim + c)\ b\sim^{c}\ (\sinh(y\sim) + b\sim)^{-c-1}\ e^{-a\sim \sinh(y\sim)} \cosh(y\sim)], [0, \infty], ["\text{Continuous}", "\text{PDF}"]]$$

"l and u", 0, ∞

"g(x)", $\operatorname{arccsch}\left(\frac{1}{x}\right)$, "base", $\left(a\sim + \frac{c}{x + b\sim}\right)\left(1 + \frac{x}{b\sim}\right)^{-c} e^{-a\sim x}$,

"GeneralizedParetoRV(a,b,c)"

"f(x)", $(a\sim \sinh(x) + a\sim b\sim + c)\ b\sim^{c}\ (\sinh(x) + b\sim)^{-c-1}\ e^{-a\sim \sinh(x)} \cosh(x)$ **(1)**