

```
> restart;
read("c:/appl/appl7.txt");
```

#### PROCEDURES:

*AllPermutations(n), AllCombinations(n, k), Benford(X), BootstrapRV(Data),  
CDF:CHF:HF:IDF:PDF:SF(X, [x]), CoefOfVar(X), Convolution(X, Y),  
ConvolutionIID(X, n), CriticalPoint(X, prob), Determinant(MATRIX), Difference(X, Y),  
Display(X), ExpectedValue(X, [g]), KSTest(X, Data, Parameters), Kurtosis(X),  
Maximum(X, Y), MaximumIID(X, n), Mean(X), MGF(X), Minimum(X, Y),  
MinimumIID(X, n), Mixture(MixParameters, MixRVs),  
MLE(X, Data, Parameters, [Rightcensor]), MLENHPP(X, Data, Parameters, obstime),  
MLEWeibull(Data, [Rightcensor]), MOM(X, Data, Parameters),  
NextCombination(Previous, size), NextPermutation(Previous), OrderStat(X, n, r, ["wo"]),  
PlotDist(X, [low], [high]), PlotEmpCDF(Data, [low], [high]),  
PlotEmpCIF(Data, [low], [high]), PlotEmpSF(Data, Censor),  
PlotEmpVsFittedCDF(X, Data, Parameters, [low], [high]),  
PlotEmpVsFittedCDF(X, Data, Parameters, [low], [high]),  
PlotEmpVsFittedSF(X, Data, Parameters, Censor, low, high),  
PPPlot(X, Data, Parameters), Product(X, Y), ProductIID(X, n),  
QQPlot(X, Data, Parameters), RangeStat(X, n, ["wo"]), Skewness(X), Transform(X, g),  
Truncate(X, low, high), Variance(X), VerifyPDF(X)*

#### Procedure Notation:

*X and Y are random variables  
Greek letters are numeric or symbolic parameters  
x is numeric or symbolic  
n and r are positive integers,  $n \geq r$   
low and high are numeric  
g is a function  
Brackets [] denote optional parameters  
"double quotes" denote character strings  
MATRIX is a 2 x 2 array of random variables  
A capitalized parameter indicates that it must be  
entered as a list --> ex. Data := [1, 12.4, 34, 52.45, 63]*

#### Variate Generation:

*ArcTanVariate(alpha, phi), BinomialVariate(n, p, m), ExponentialVariate(lambda),  
NormalVariate(mu, sigma), UniformVariate(), WeibullVariate(lambda, kappa, m)*

#### DATA SETS:

*BallBearing, HorseKickFatalities, Hurricane, MP6, RatControl, RatTreatment, USSHalfBeak  
ArcSinRV(), ArcTanRV(alpha, phi), BetaRV(alpha, beta), CauchyRV(a, alpha), ChiRV(n),*

*ChiSquareRV(n), ErlangRV(lambda, n), ErrorRV(mu, alpha, d), ExponentialRV(lambda),  
 ExponentialPowerRV(lambda, kappa), ExtremeValueRV(alpha, beta), FRV(n1, n2),  
 GammaRV(lambda, kappa), GeneralizedParetoRV(gamma, delta, kappa),  
 GompertzRV(delta, kappa), HyperbolicSecantRV(), HyperExponentialRV(p, l),  
 HypoExponentialRV(l), IDBRV(gamma, delta, kappa), InverseGaussianRV(lambda, mu),  
 InvertedGammaRV(alpha, beta), KSRV(n), LaPlaceRV(omega, theta),  
 LogGammaRV(alpha, beta), LogisticRV(kappa, lambda), LogLogisticRV(lambda, kappa),  
 LogNormalRV(mu, sigma), LomaxRV(kappa, lambda), MakehamRV(gamma, delta, kappa),  
 MuthRV(kappa), NormalRV(mu, sigma), ParetoRV(lambda, kappa), RayleighRV(lambda),  
 StandardCauchyRV(), StandardNormalRV(), StandardTriangularRV(m),  
 StandardUniformRV(), TRV(n), TriangularRV(a, m, b), UniformRV(a, b),  
 WeibullRV(lambda, kappa)*

Error, attempting to assign to `DataSets` which is protected.  
 Try declaring `local DataSets`; see ?protect for details.

```
> bf := BetaRV(2,3);
    bfname := "BetaRV(2,3)";
          bf := [[x→12 x (1-x)2], [0, 1], ["Continuous", "PDF"]]
          bfname := "BetaRV(2,3)" (1)
```

```
> #plot(1/csch(t)+1, t = 0..0.0010);
#plot(diff(1/csch(t),t), t=0..0.0010);
#limit(1/csch(t), t=0);
> solve(exp(-t) = y, t);
          -ln(y) (2)
```

```
> # discarded -ln(t + 1), t-> csch(t), t->arccsch(t), t -> tan(t),
> #name of the file for latex output
filename := "C:/LatexOutput/Trash.tex";

glist := [t -> t^2, t -> sqrt(t), t -> 1/t, t -> arctan(t), t
-> exp(t), t -> ln(t), t -> exp(-t), t -> -ln(t), t -> ln(t+1),
t -> 1/(ln(t+2)), t -> tanh(t), t -> sinh(t), t -> arcsinh(t),
t-> csch(t+1), t->arccsch(t+1), t-> 1/tanh(t+1), t-> 1/sinh(t+1),
t-> 1/arcsinh(t+1), t-> 1/csch(t)+1, t-> tanh(1/t), t->csch
(1/t), t-> arccsch(1/t), t-> arctanh(1/t) ]:

base := t -> PDF(bf, t):

print(base(x)):

#begin loopint through transformations
for i from 1 to 22 do
#for i from 1 to 3 do
    print( "i is", i, " -----"
-----" );
```

```

g := glist[i]:
l := bf[2][1];
u := bf[2][2];
Temp := Transform(bf, [[unapply(g(x), x)], [l,u]]);

#terminal output

PlotDist(PDF(Temp), 0, 40);
PlotDist(HF(Temp), 0, 40);

od;

```

*filename := "C:/LatexOutput/Trash.tex"*

$$12 x (1 - x)^2$$

"i is", 1,

"-----"

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

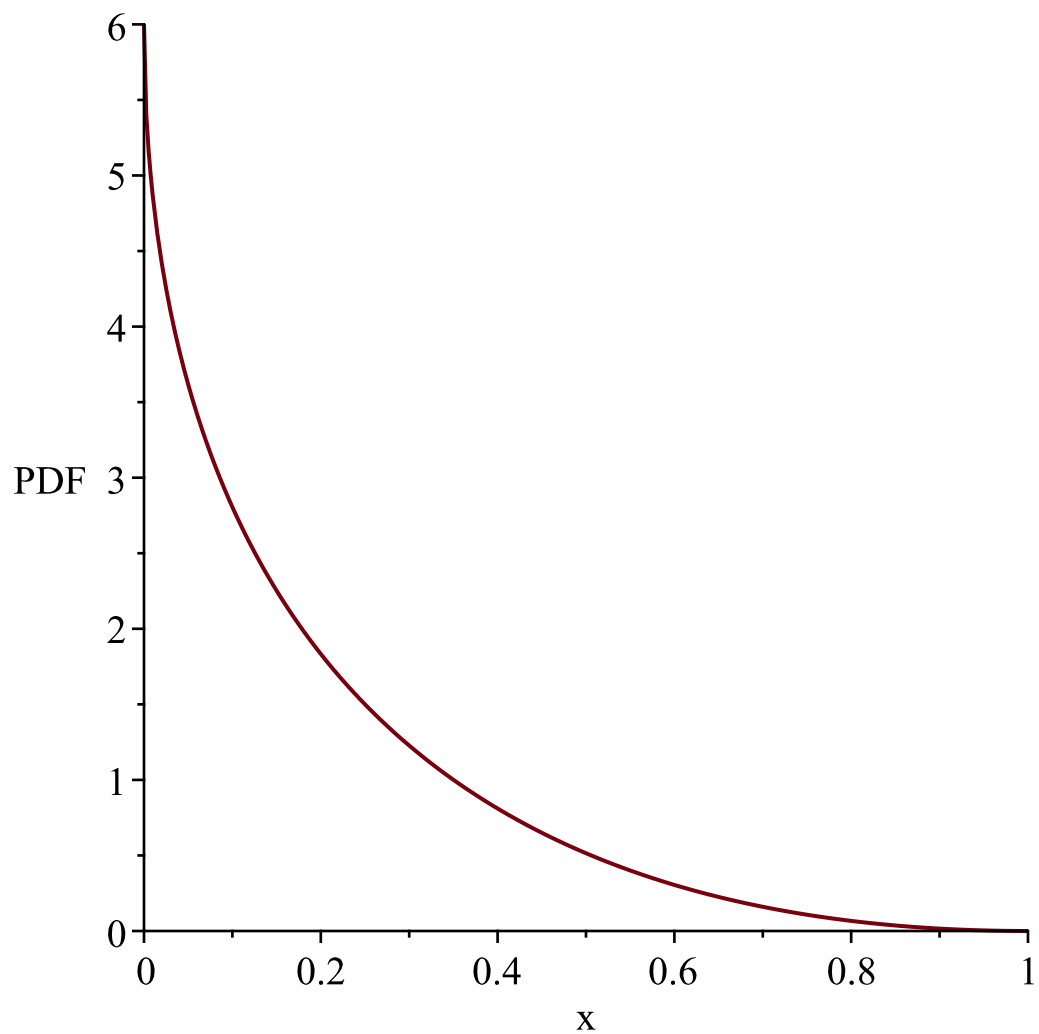
$$l := 0$$

$$u := 1$$

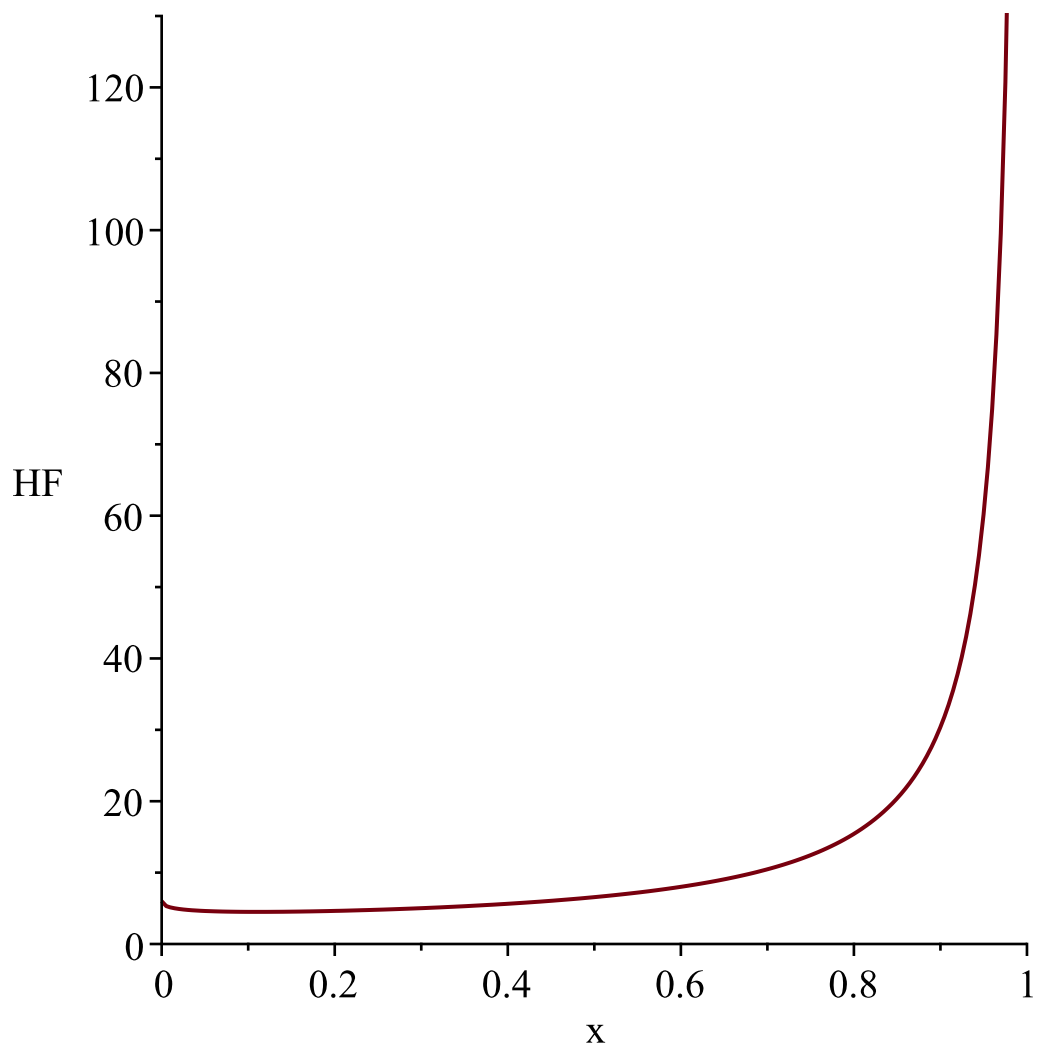
$$Temp := \left[ \left[ y \rightarrow 6 \left( -1 + \sqrt{y} \right)^2 \right], [0, 1], ["Continuous", "PDF"] \right]$$

*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*



"i is", 2,

"

-----"

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

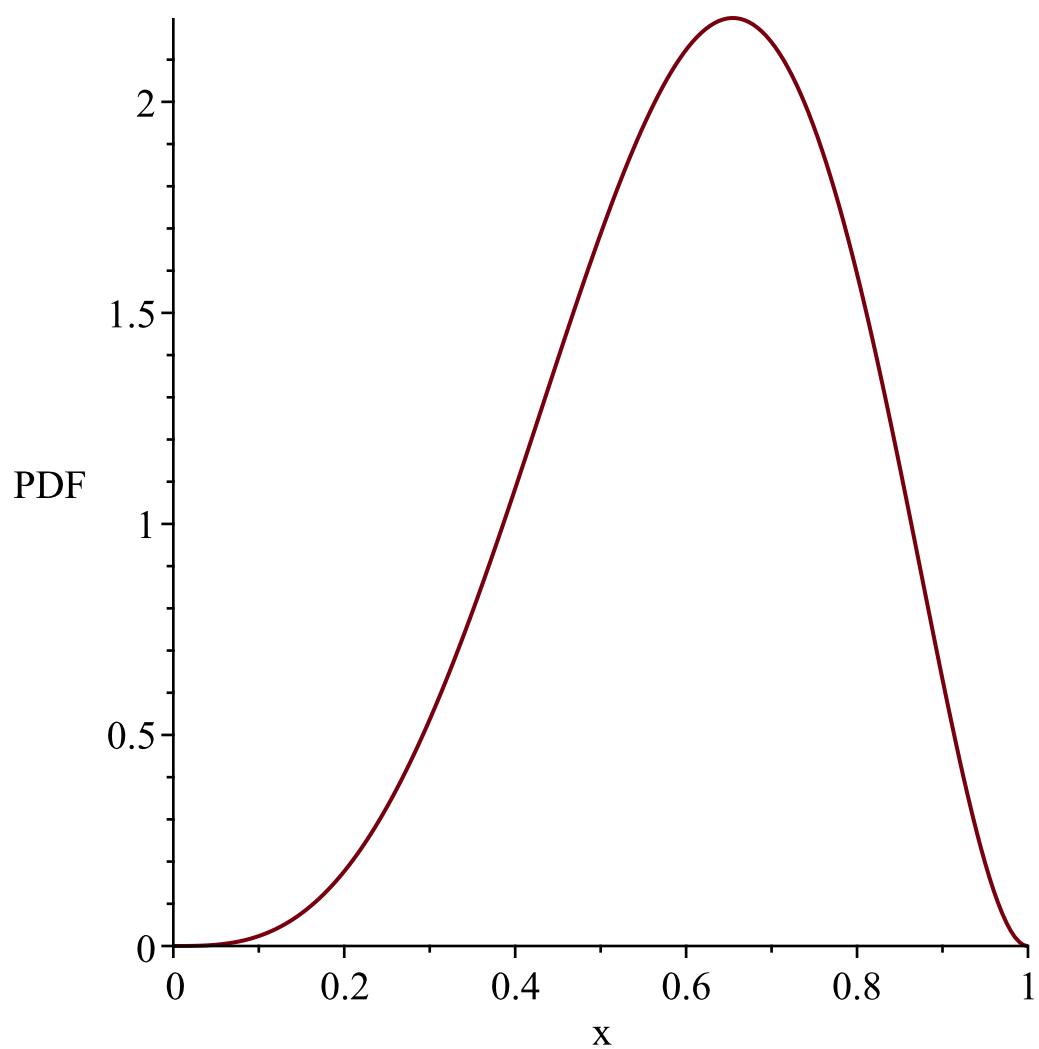
$l := 0$

$u := 1$

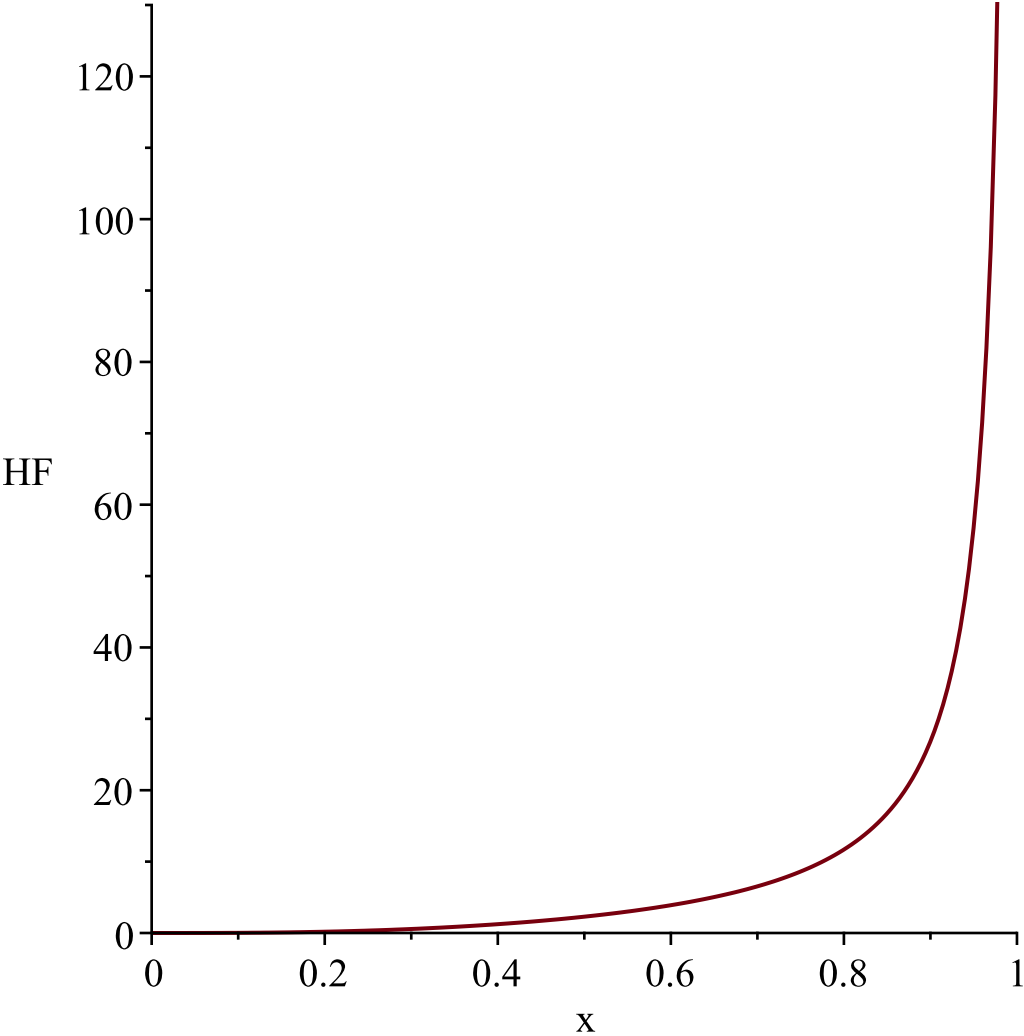
$Temp := \left[ \left[ y \rightarrow 24 y^3 (y^2 - 1)^2 \right], [0, 1], ["Continuous", "PDF"] \right]$

*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*



"i is", 3,  
"-----"  
-----"

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

$$l := 0$$

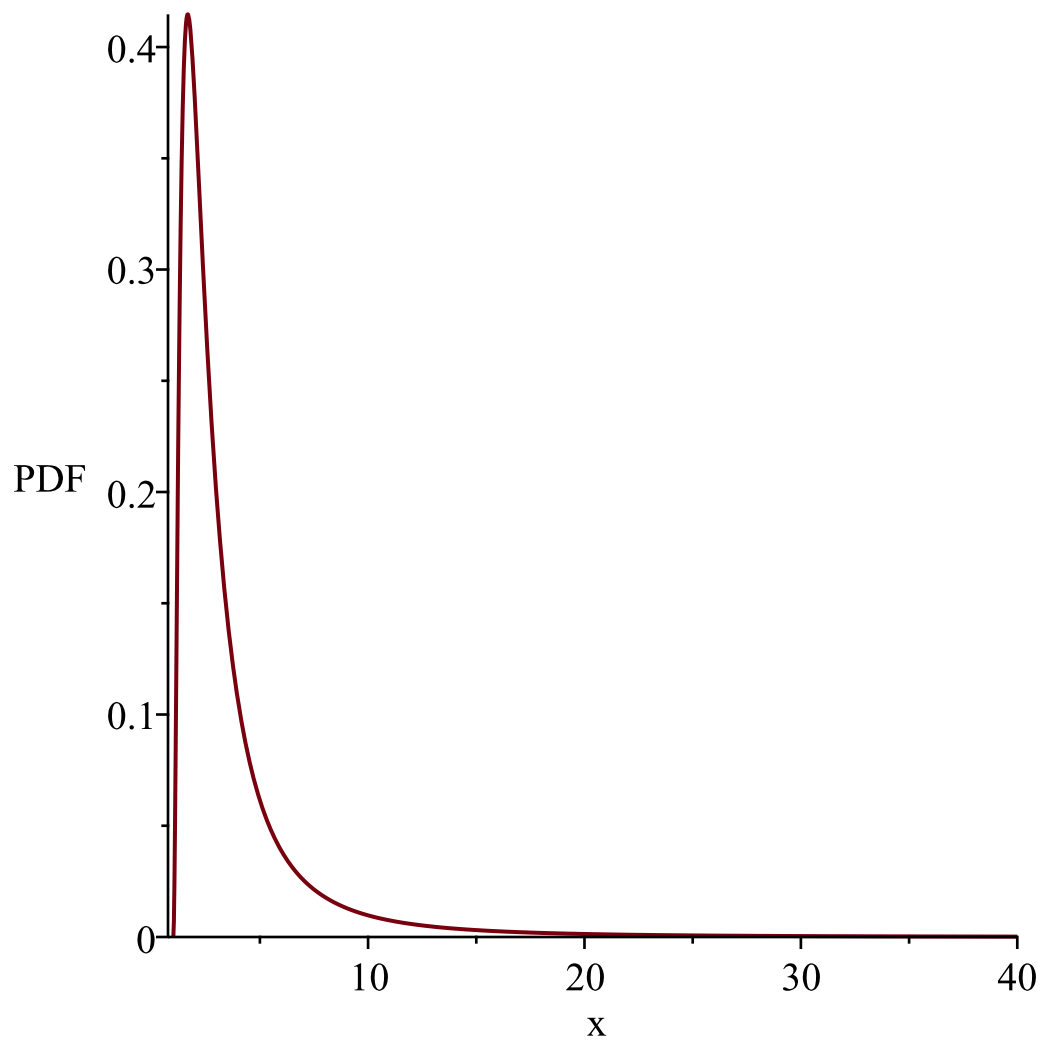
$$u := 1$$

$$Temp := \left[ \left[ y \sim \rightarrow \frac{12 \, (y \sim - 1)^2}{y \sim^5} \right], [1, \infty], ["Continuous", "PDF"] \right]$$

*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*

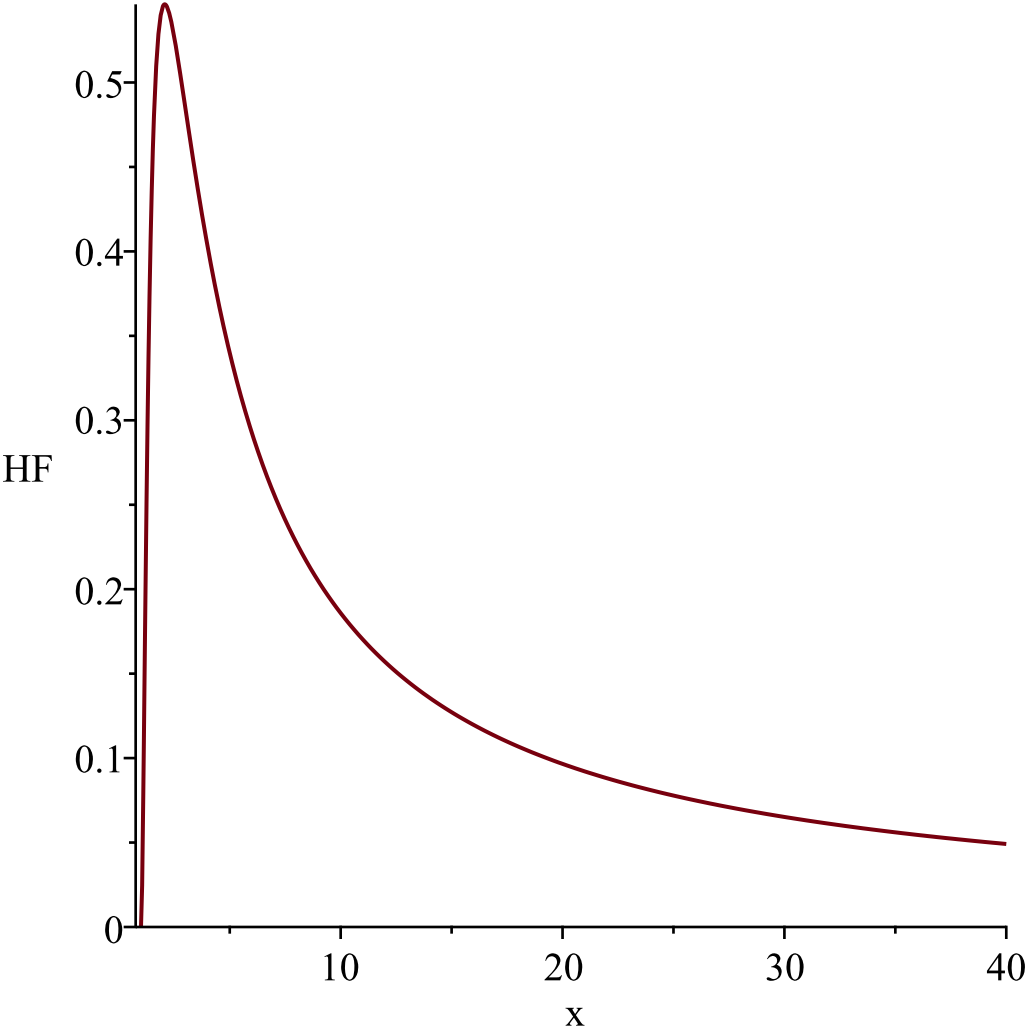


*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

1

*Resetting low to RV's minimum support value*

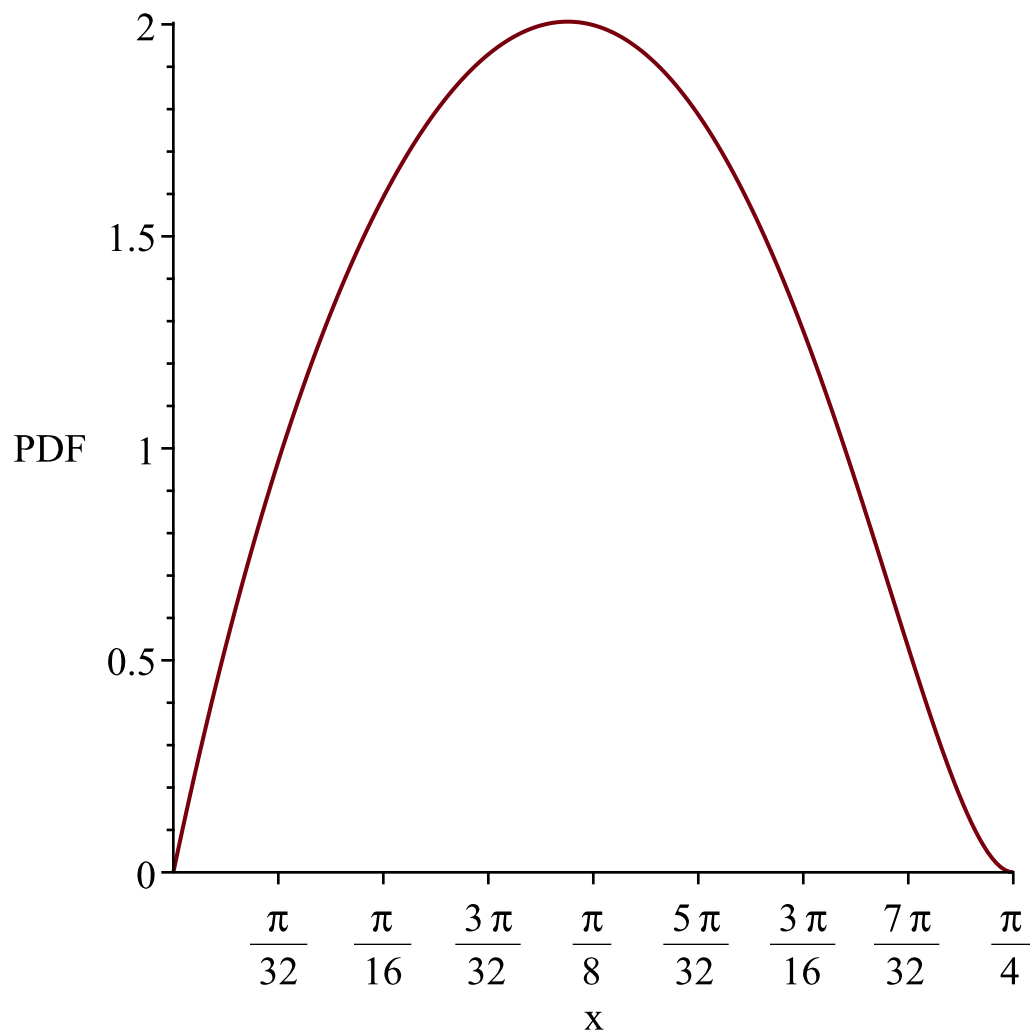




"i is", 4,  
"-----"  
-----"

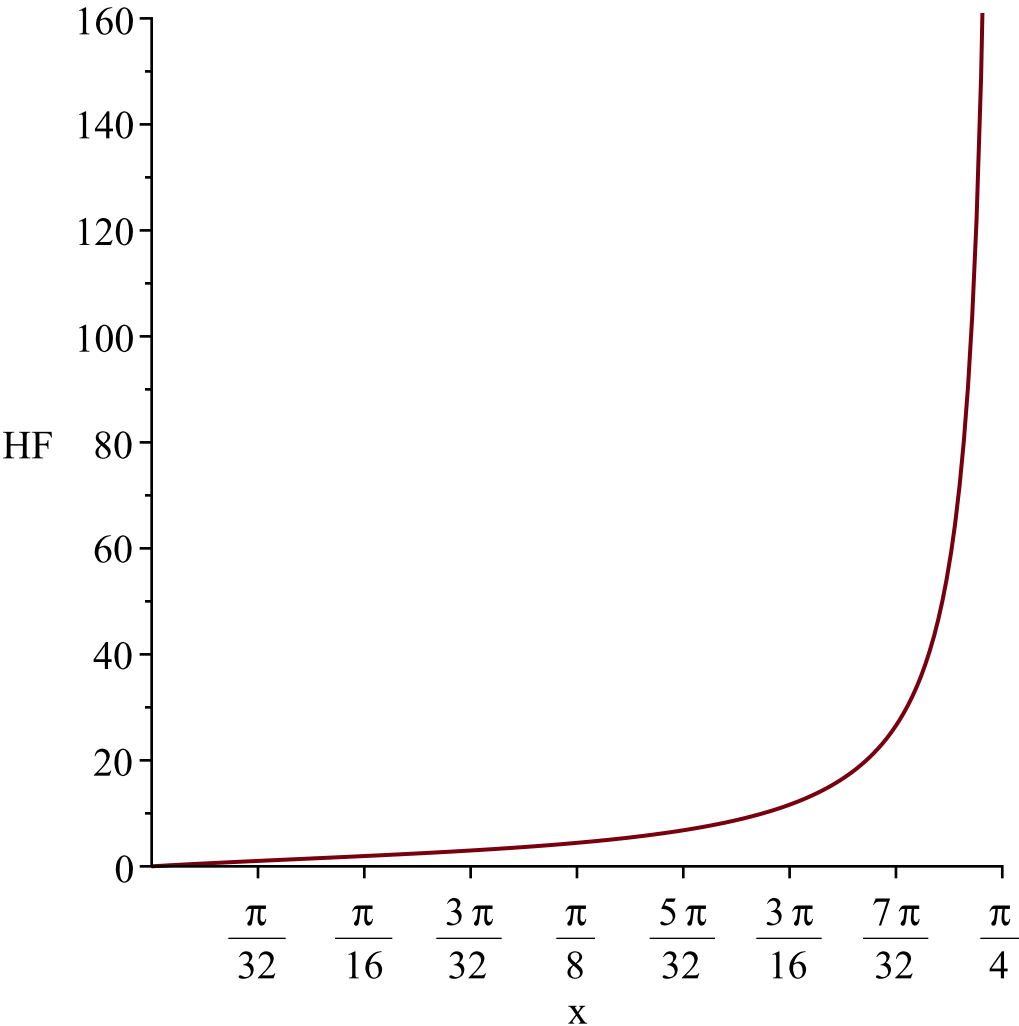
```
g := t→arctan(t)
l := 0
u := 1
Temp := [ [y~→12 tan(y~) (-1 + tan(y~))2 (1 + tan(y~)2) ], [ 0,  $\frac{1}{4} \pi$  ], ["Continuous",
"PDF"] ]
```

*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $\frac{1}{4} \pi$   
Resetting high to RV's maximum support value*



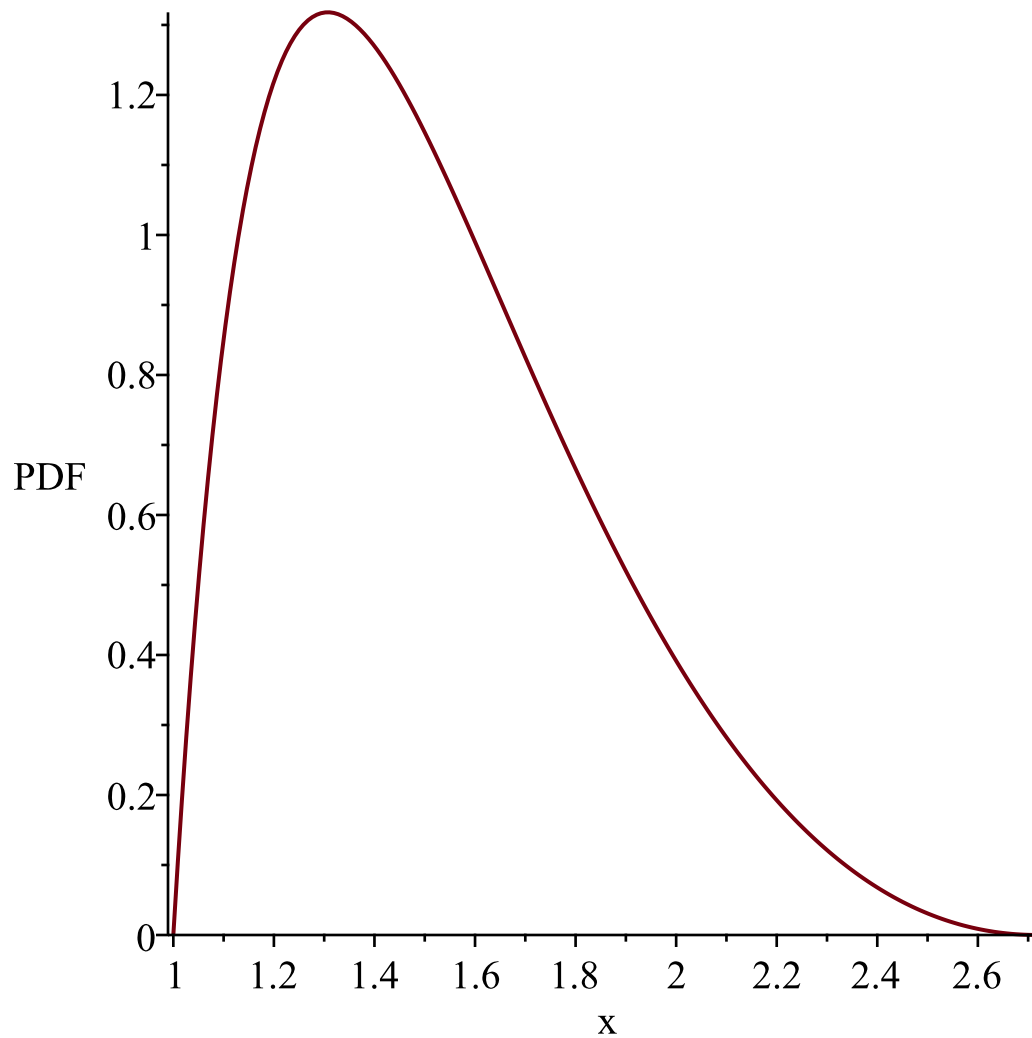
*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $\frac{1}{4} \pi$*

*Resetting high to RV's maximum support value*



"i is", 5,  
"-----"  
-----"

```
g := t→et
l := 0
u := 1
Temp := ⌊⌊ y~→  $\frac{12 \ln(y~) (-1 + \ln(y~))^2}{y~}$  ⌋, [1,e], ["Continuous", "PDF"] ⌋
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): High value provided by user, 40
is greater than maximum support value of the random
variable,e
Resetting high to RV's maximum support value
```

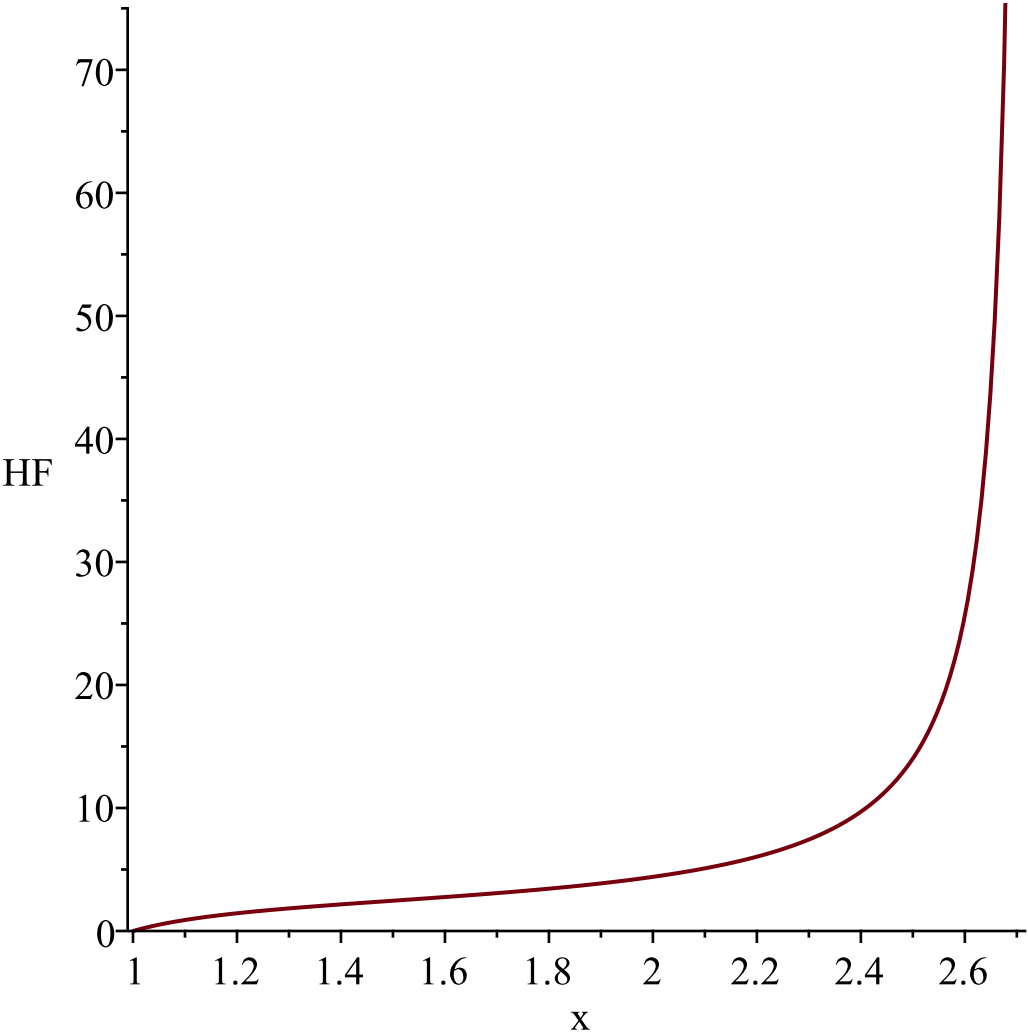


*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

*1*

*Resetting low to RV's minimum support value  
WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,e*

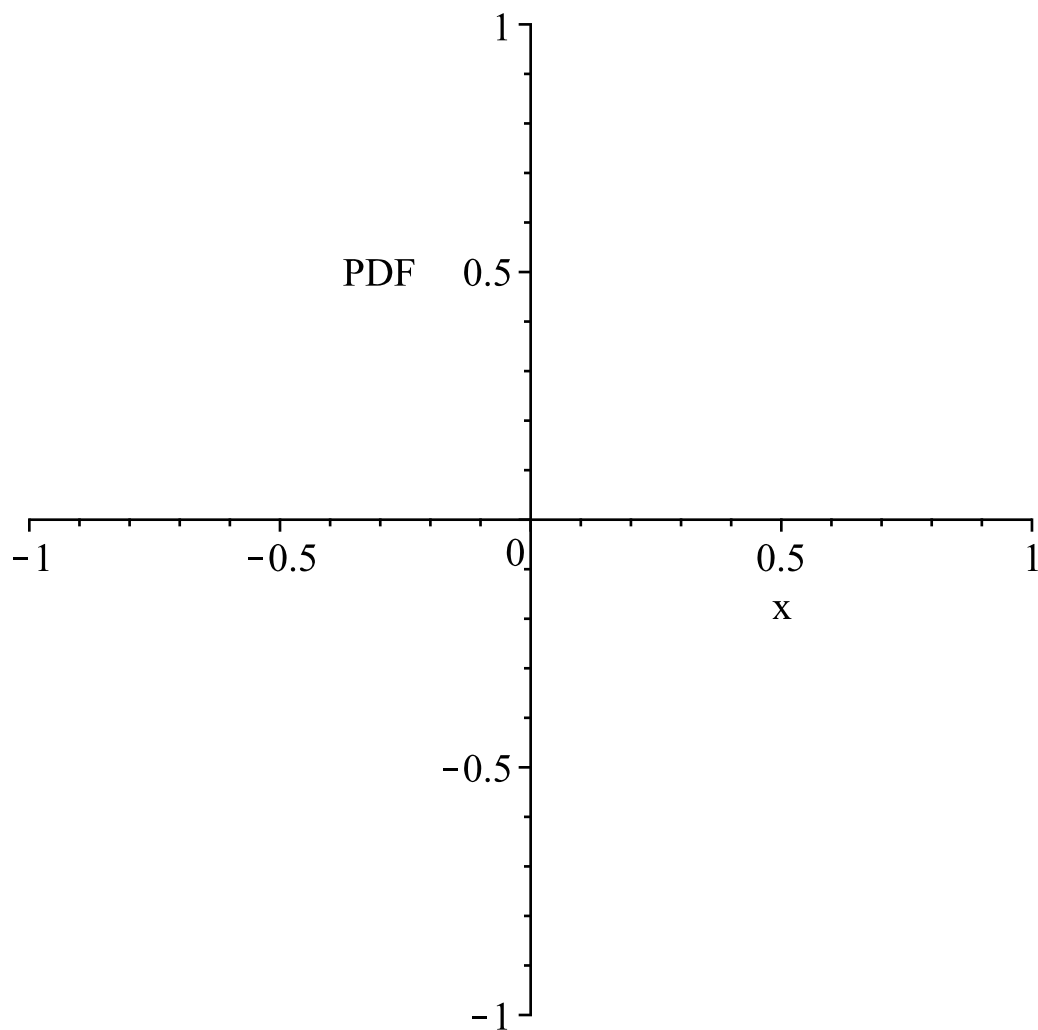
*Resetting high to RV's maximum support value*



"i is", 6,  
" \_\_\_\_\_"  
"\_\_\_\_\_"

```
g := t→ln(t)
l := 0
u := 1
Temp := [[y~→12 e2y~ (-1 + ey~)2], [- ∞, 0], ["Continuous", "PDF"]]
```

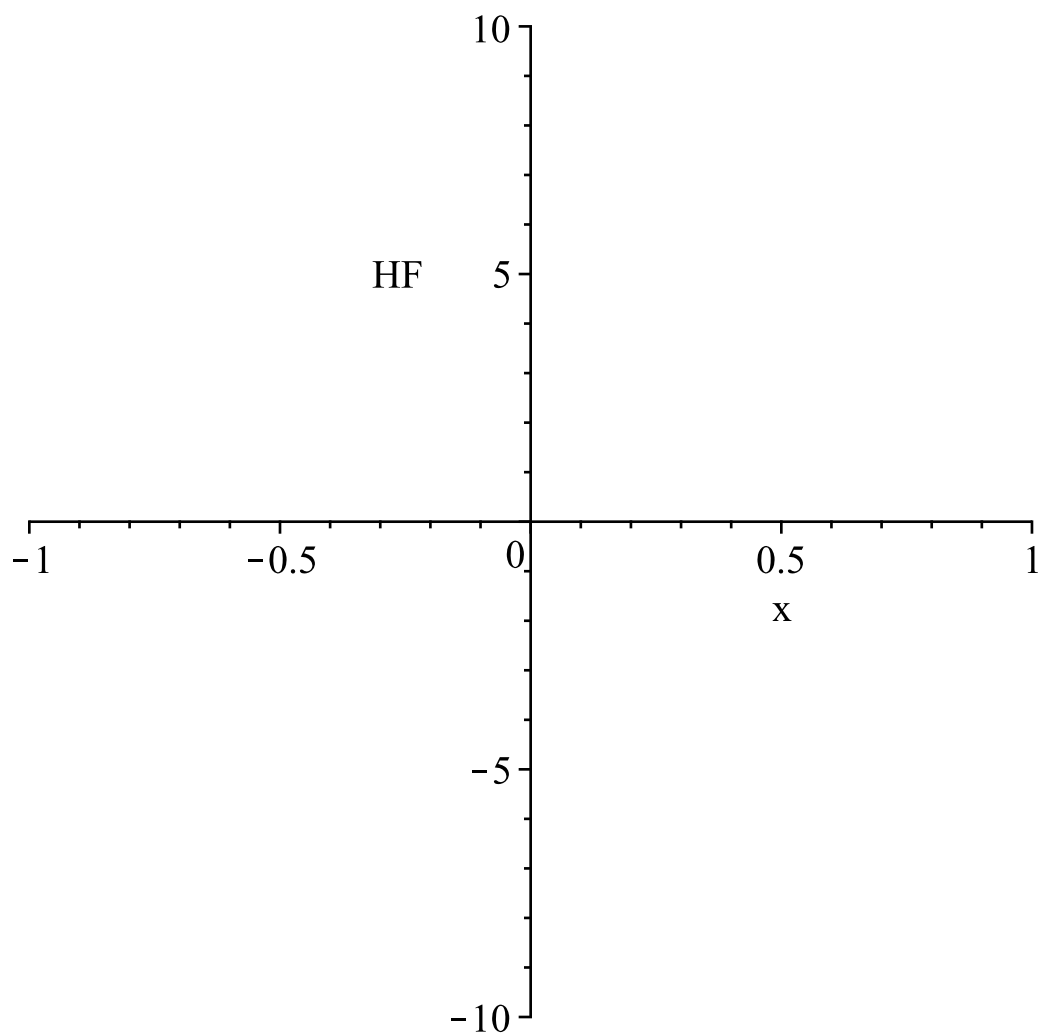
*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable, 0  
Resetting high to RV's maximum support value*



*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable, 0*

*Resetting high to RV's maximum support value*

Warning, unable to evaluate the function to numeric values in  
the region; see the plotting command's help page to ensure the  
calling sequence is correct



"i is", 7,

"-----"

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

$$l := 0$$

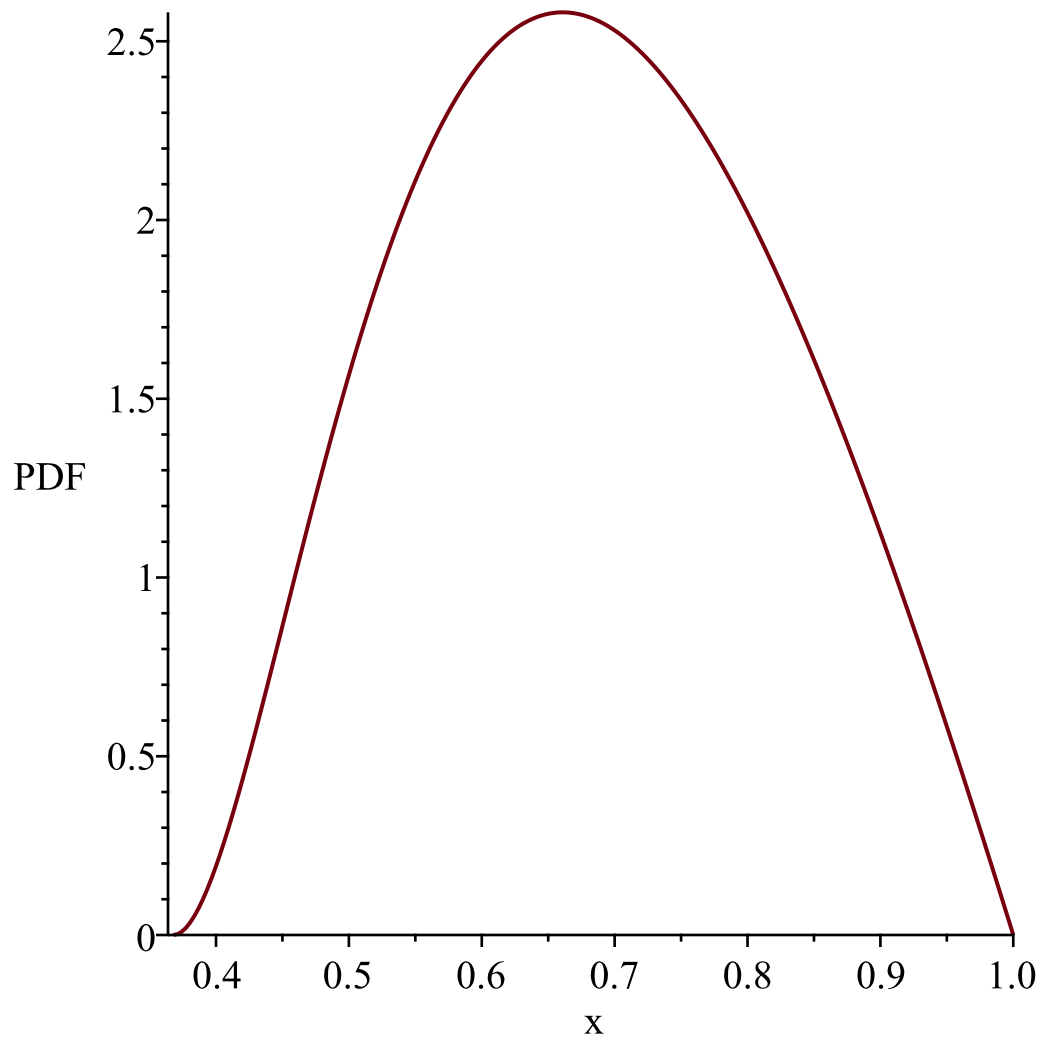
$$u := 1$$

$$Temp := \left[ \left[ y \sim \rightarrow -\frac{12 \ln(y \sim) (1 + \ln(y \sim))^2}{y \sim} \right], [e^{-1}, 1], ["Continuous", "PDF"] \right]$$

*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable  
 $e^{-1}$*

*Resetting low to RV's minimum 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*

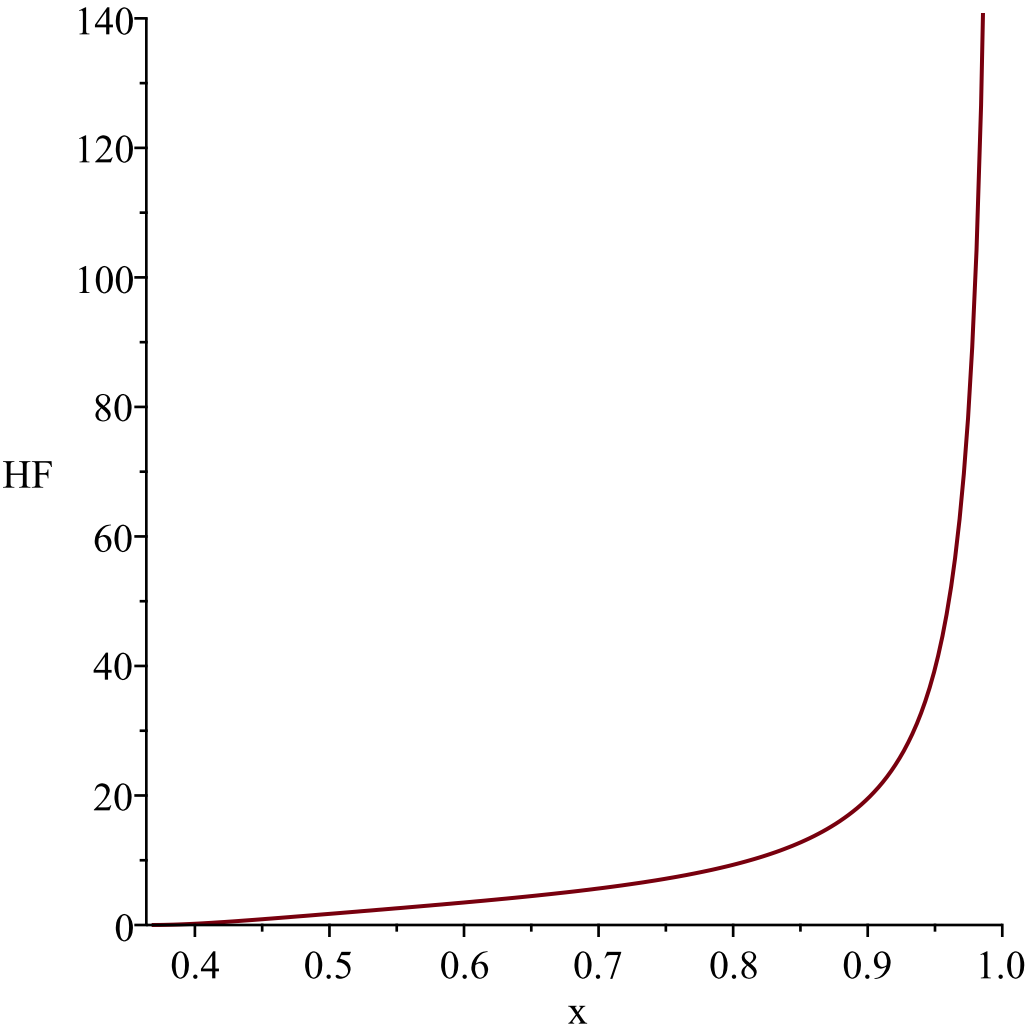


*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable  
 $e^{-1}$*

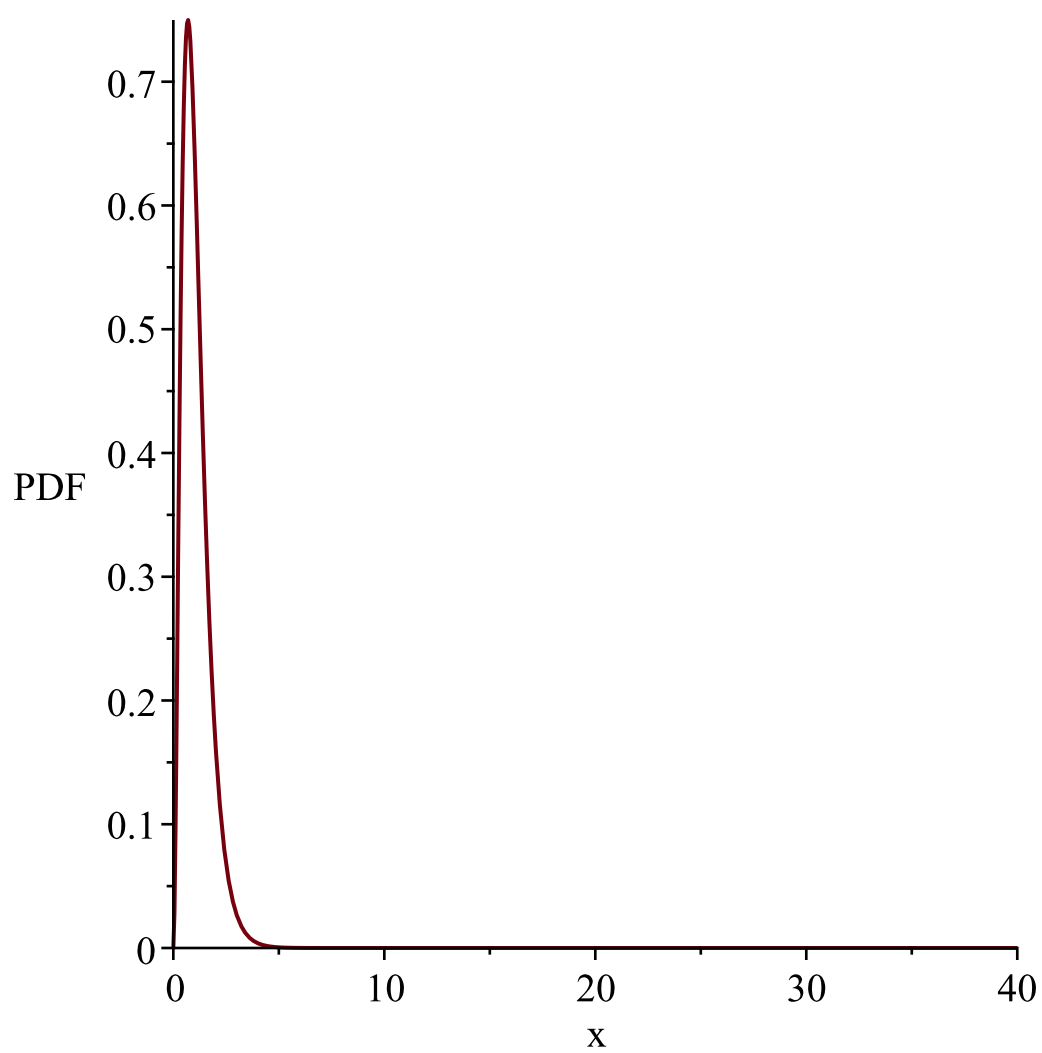
*Resetting low to RV's minimum support value  
WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable, 1*

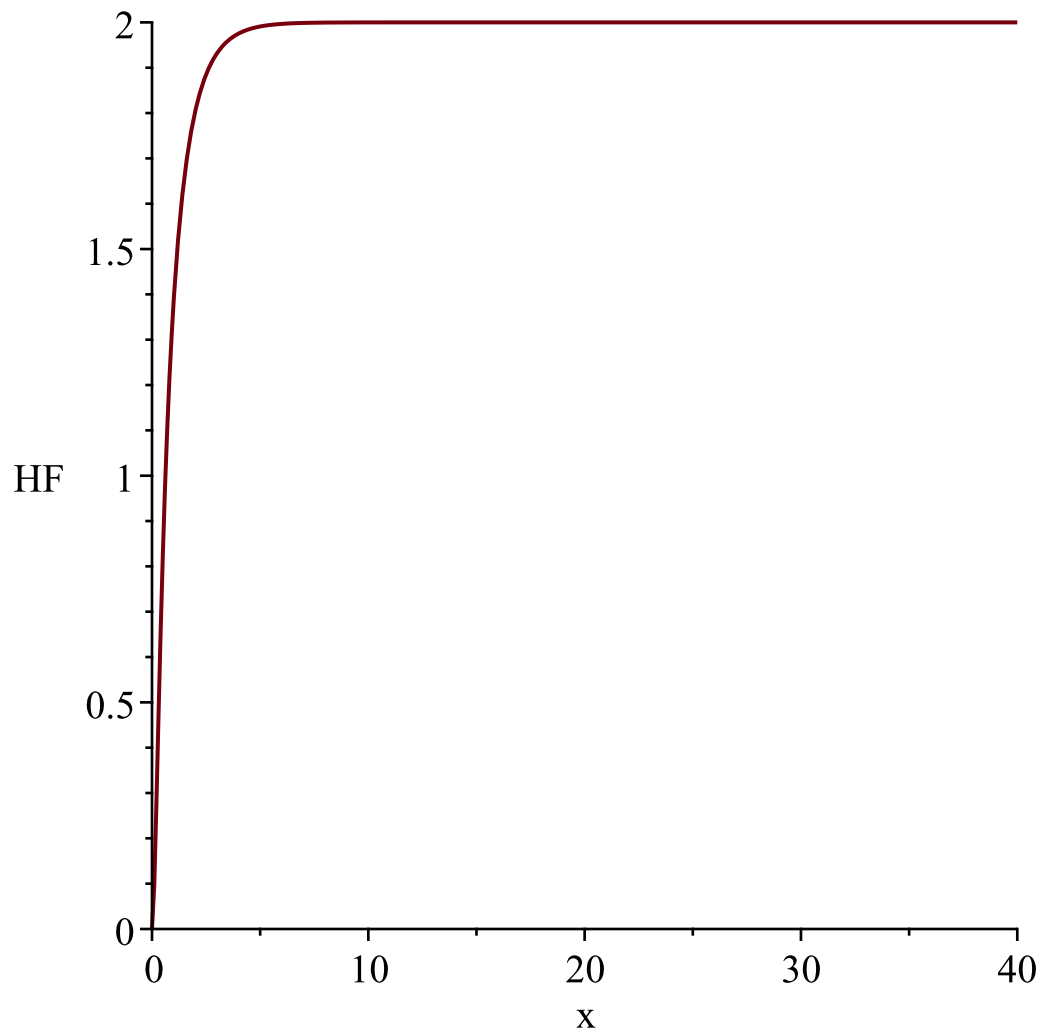
*Resetting high to RV's maximum support value*





```
"i is", 8,  
" _____"  
"_____"  
  
g := t→ -ln(t)  
l := 0  
u := 1  
Temp := [[y~→12 e-4 y~ (-1 + ey~)2], [0, ∞], ["Continuous", "PDF"]]
```





"i is", 9,

"-----"

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

$l := 0$

$u := 1$

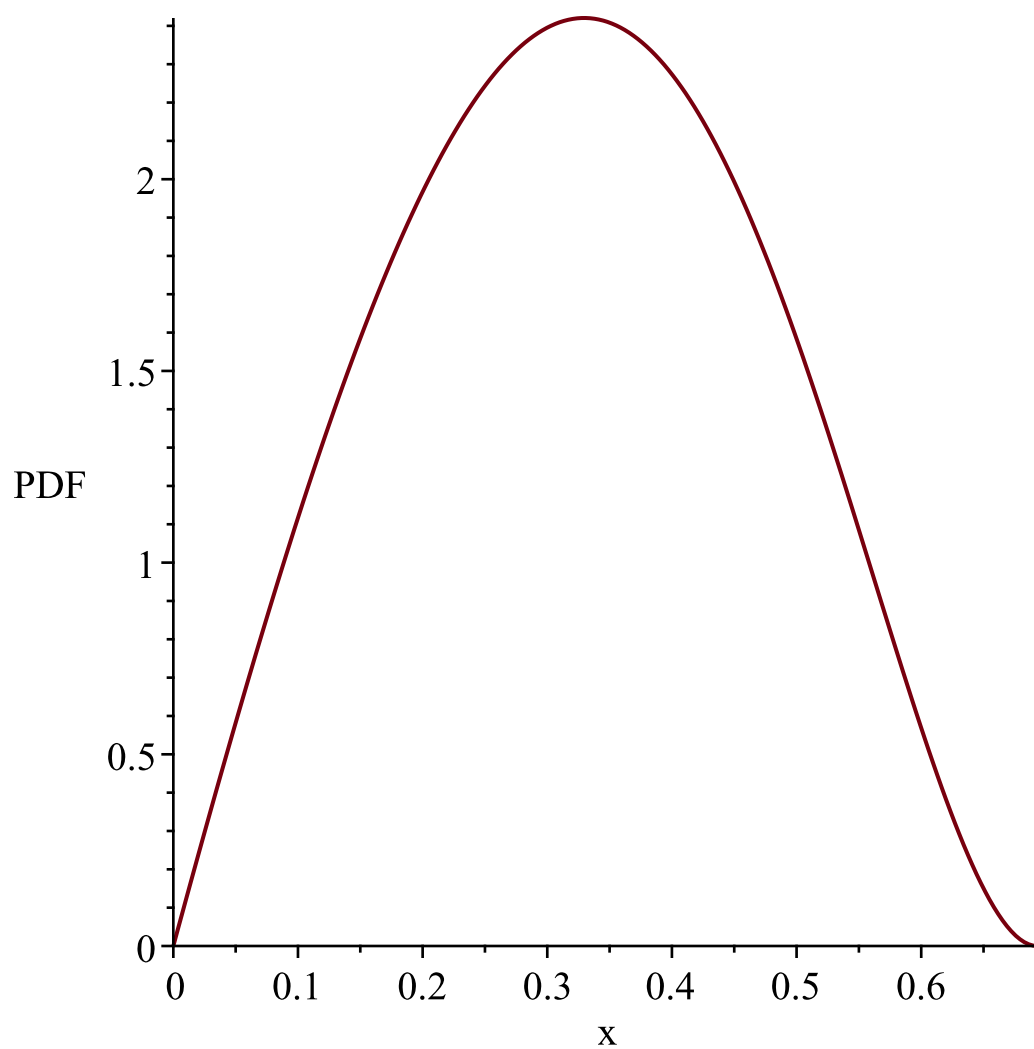
$Temp := \left[ \left[ y \sim 12 \left( -1 + e^{y^{\sim}} \right) \left( -2 + e^{y^{\sim}} \right)^2 e^{y^{\sim}} \right], [0, \ln(2)], ["Continuous", "PDF"] \right]$

*WARNING(PlotDist): High value provided by user, 40*

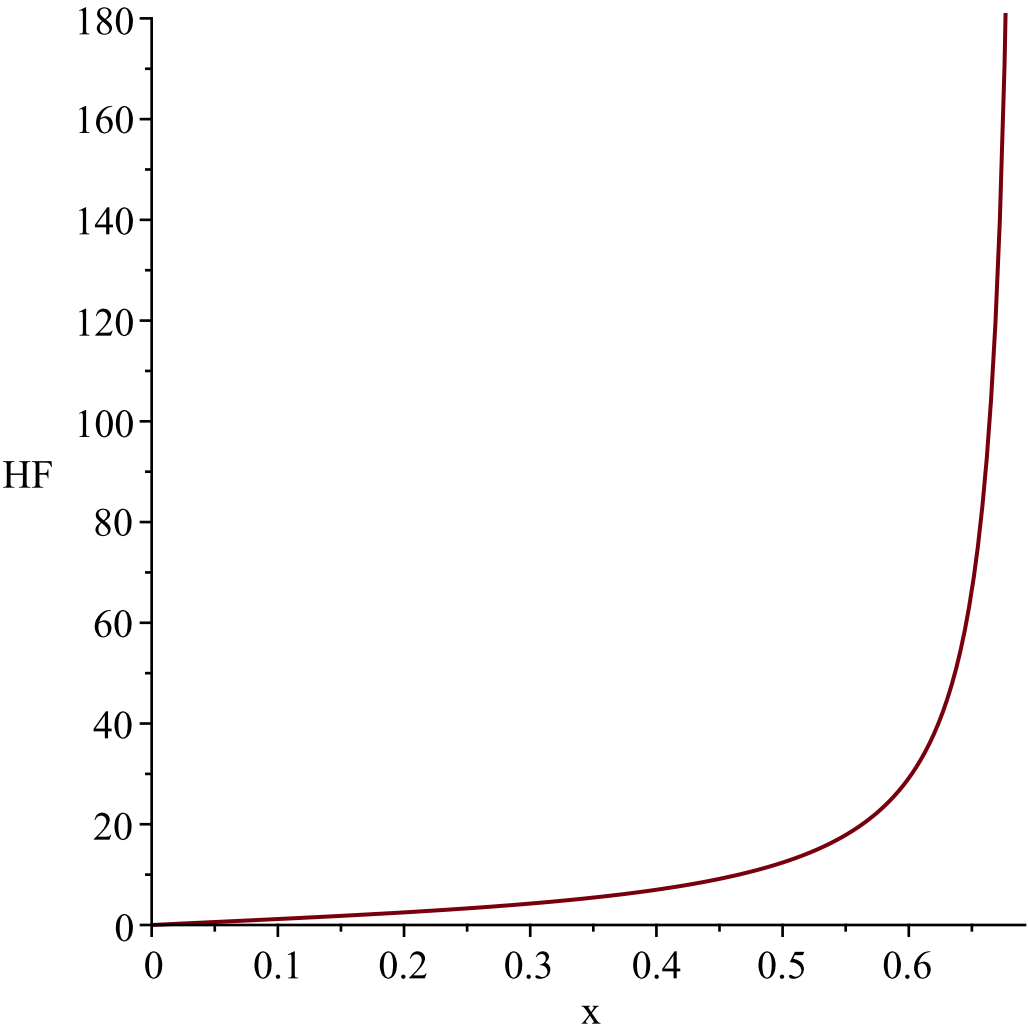
*is greater than maximum support value of the random*

*variable,  $\ln(2)$*

*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  
variable,  $\ln(2)$   
Resetting high to RV's maximum support value*



"i is", 10,  
"-----"  
-----"

$$g := t \rightarrow \frac{1}{\ln(t + 2)}$$
$$l := 0$$
$$u := 1$$

$$Temp := \left[ \left[ y \sim \rightarrow \frac{12 \left( e^{\frac{1}{y}} - 2 \right) \left( -3 + e^{\frac{1}{y}} \right)^2 e^{\frac{1}{y}}}{y^2} \right], \left[ \frac{1}{\ln(3)}, \frac{1}{\ln(2)} \right], ["Continuous",$$

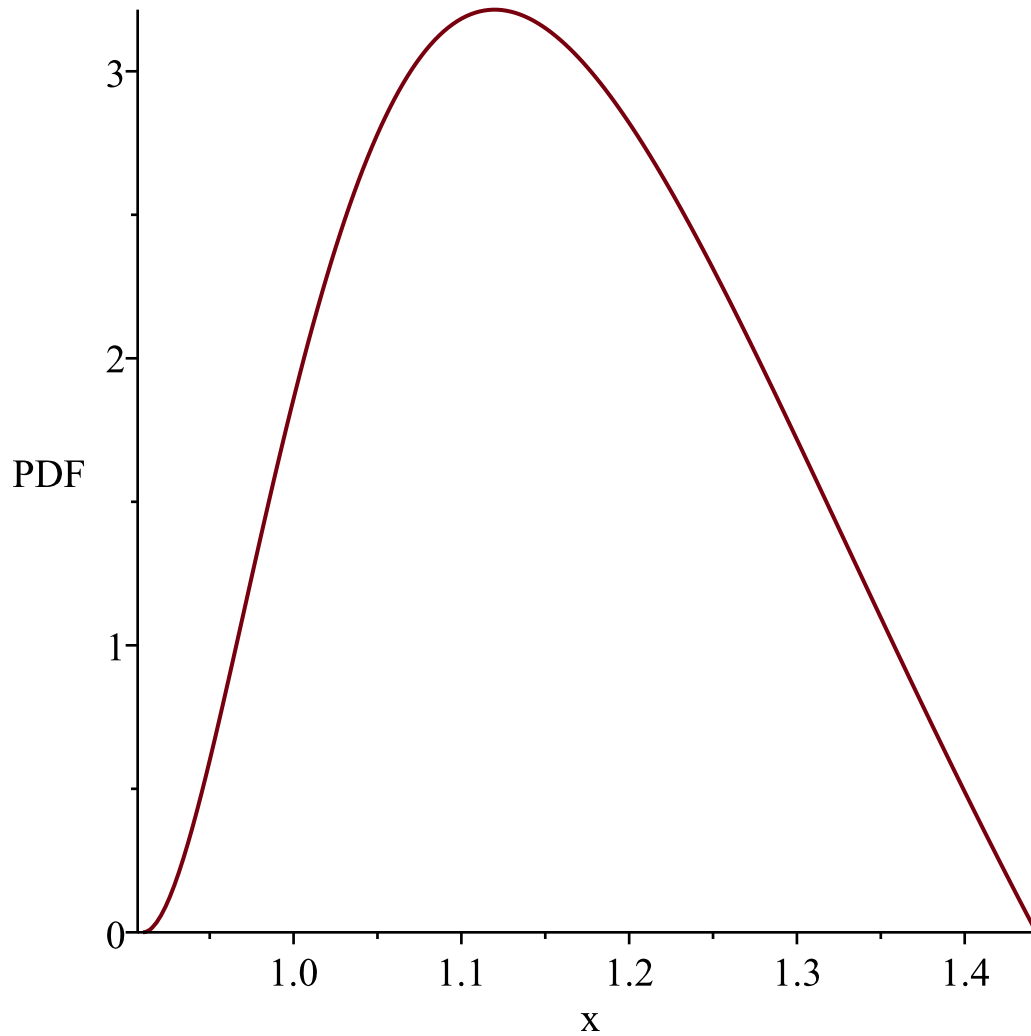
"PDF"]

*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

$$\frac{1}{\ln(3)}$$

*Resetting low to RV's minimum support value*  
*WARNING(PlotDist): High value provided by user, 40*  
*is greater than maximum support value of the random*  
*variable,  $\frac{1}{\ln(2)}$*

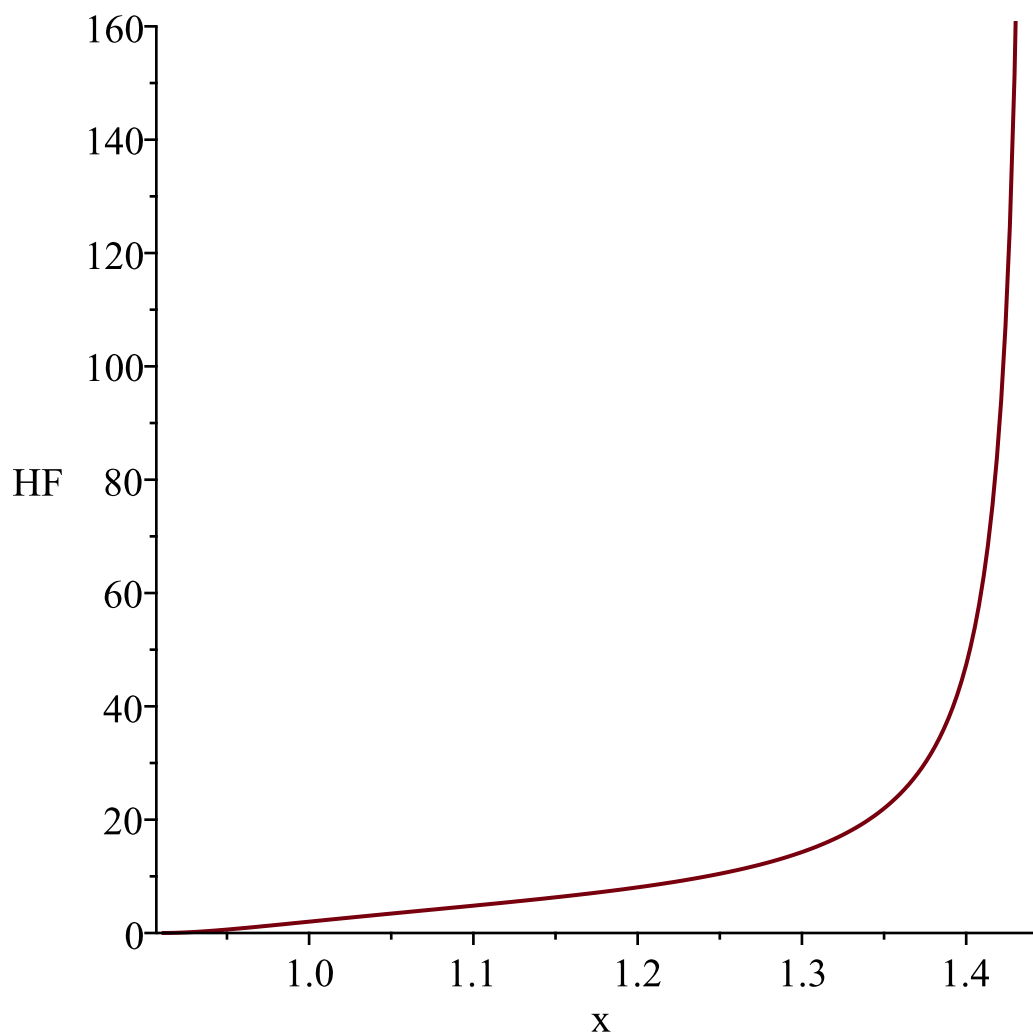
*Resetting high to RV's maximum support value*



*WARNING(PlotDist): Low value provided by user, 0*  
*is less than minimum support value of random variable*  
 *$\frac{1}{\ln(3)}$*

*Resetting low to RV's minimum support value*  
*WARNING(PlotDist): High value provided by user, 40*  
*is greater than maximum support value of the random*  
*variable,  $\frac{1}{\ln(2)}$*

*Resetting high to RV's maximum support value*



"i is", 11,

"-----"

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

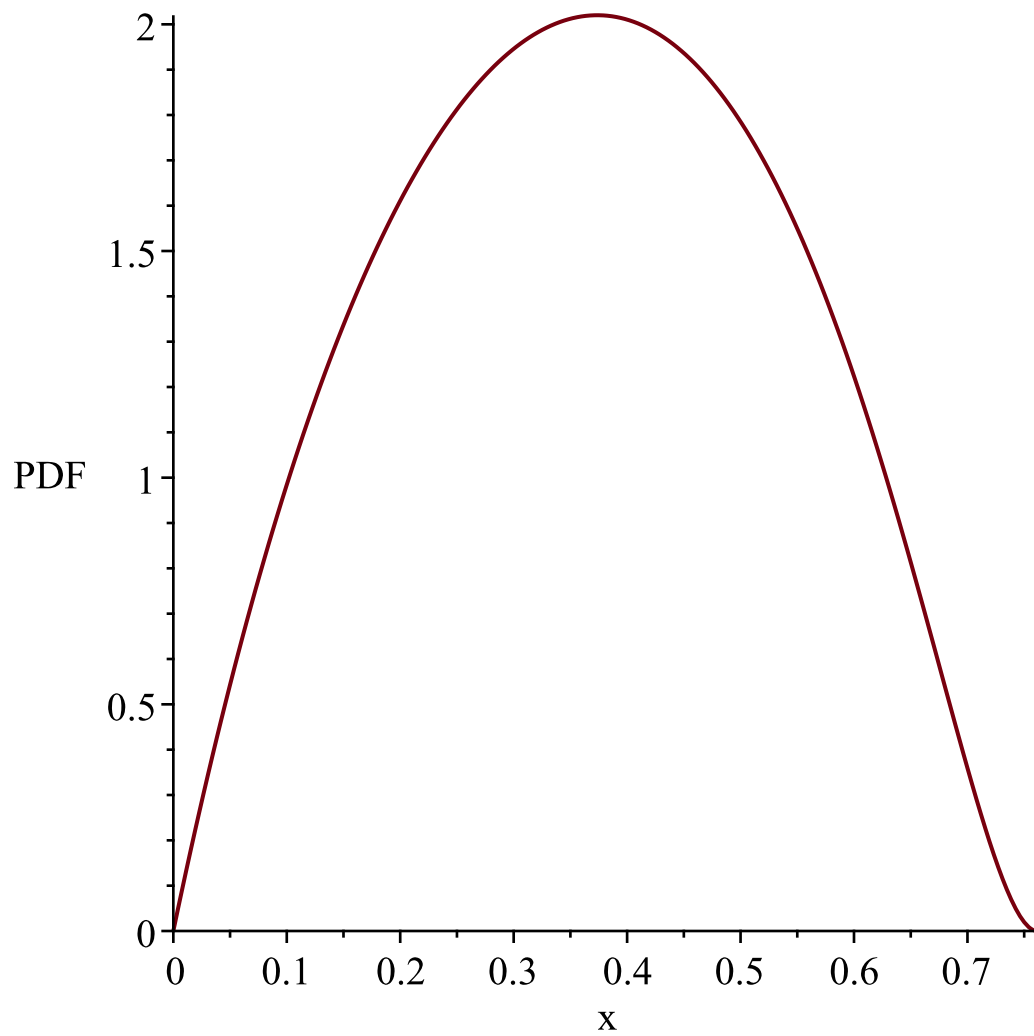
$l := 0$

$u := 1$

$Temp := \left[ \left[ y \rightarrow -\frac{12 \operatorname{arctanh}(y) (-1 + \operatorname{arctanh}(y))^2}{y^2 - 1} \right], [0, \tanh(1)], ["Continuous", "PDF"] \right]$

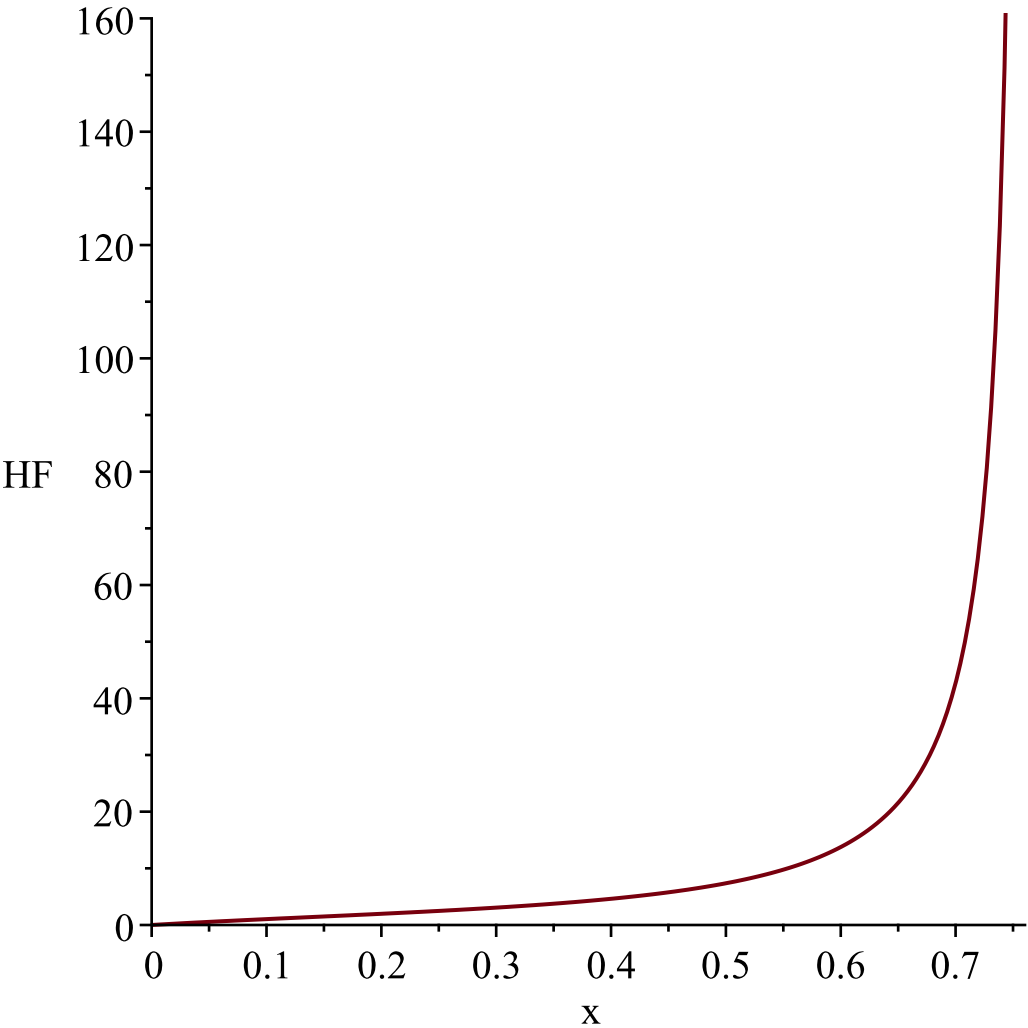
*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $\tanh(1)$*

*Resetting high to RV's maximum support value*



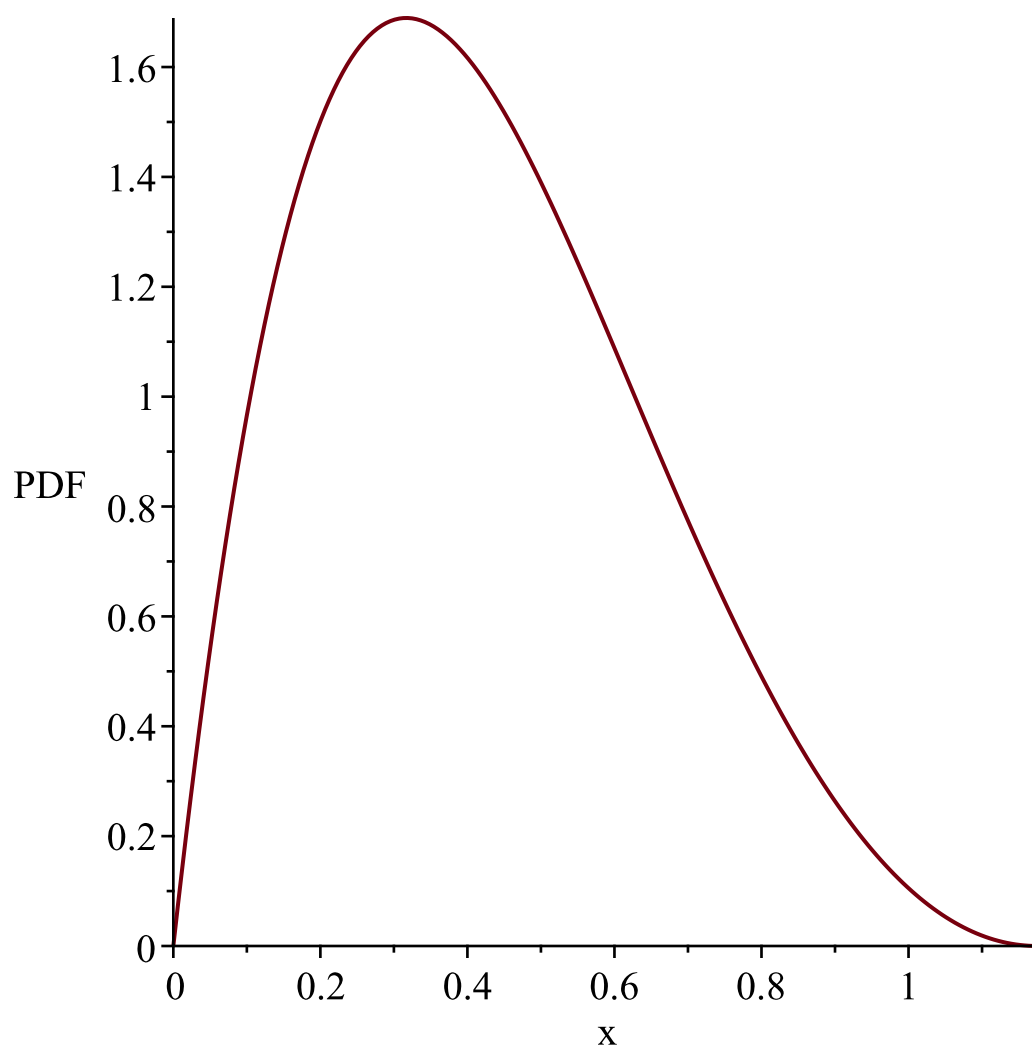
*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $\tanh(1)$   
Resetting high to RV's maximum support value*



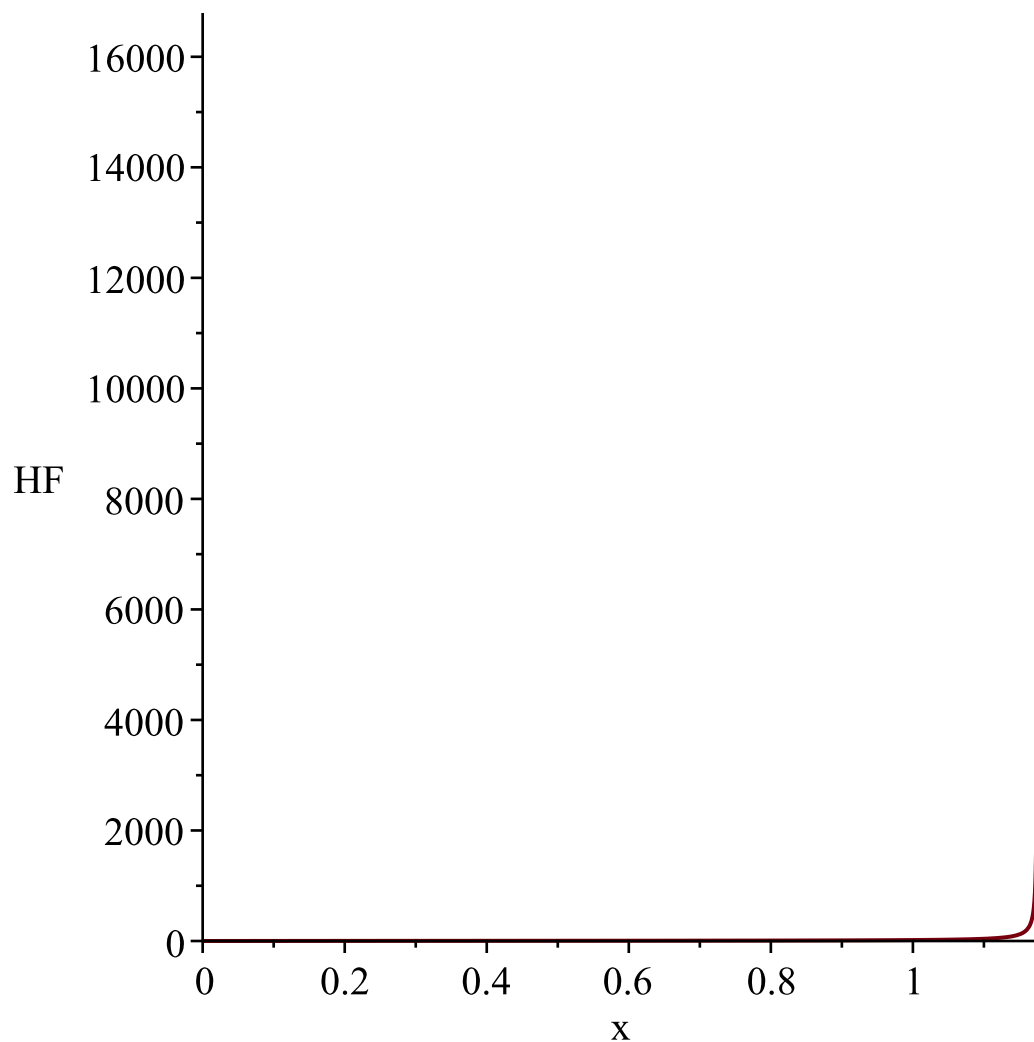


"i is", 12,  
"-----"  
-----"

```
g := t→sinh(t)
l := 0
u := 1
Temp := ⌈⌊y~→ 12 arcsinh(y~) (-1 + arcsinh(y~))² / √(y~² + 1)⌋, [0, sinh(1)], ["Continuous", "PDF"]⌋
WARNING(PlotDist): High value provided by user, 40
is greater than maximum support value of the random
variable, sinh(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,  $\sinh(1)$   
Resetting high to RV's maximum support value*



"i is", 13,

"-----"

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

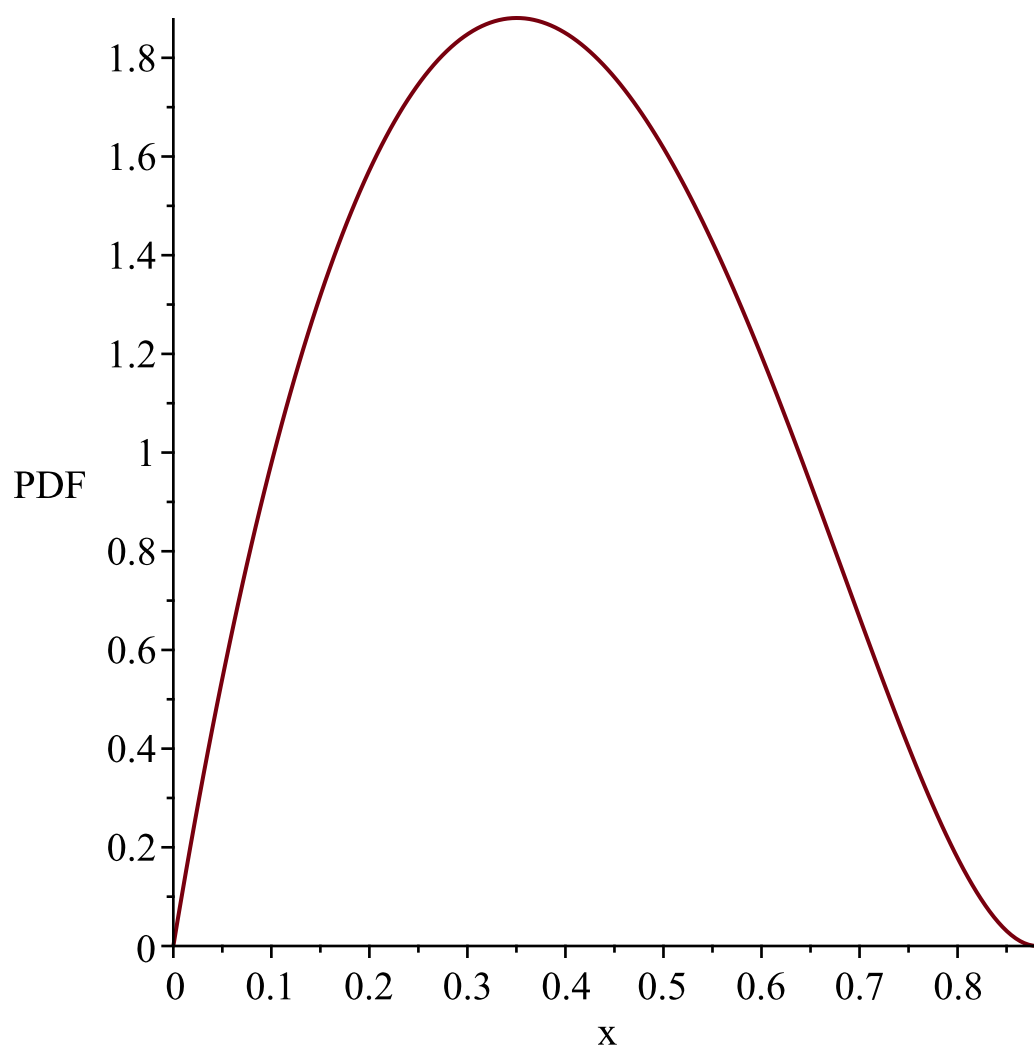
$l := 0$

$u := 1$

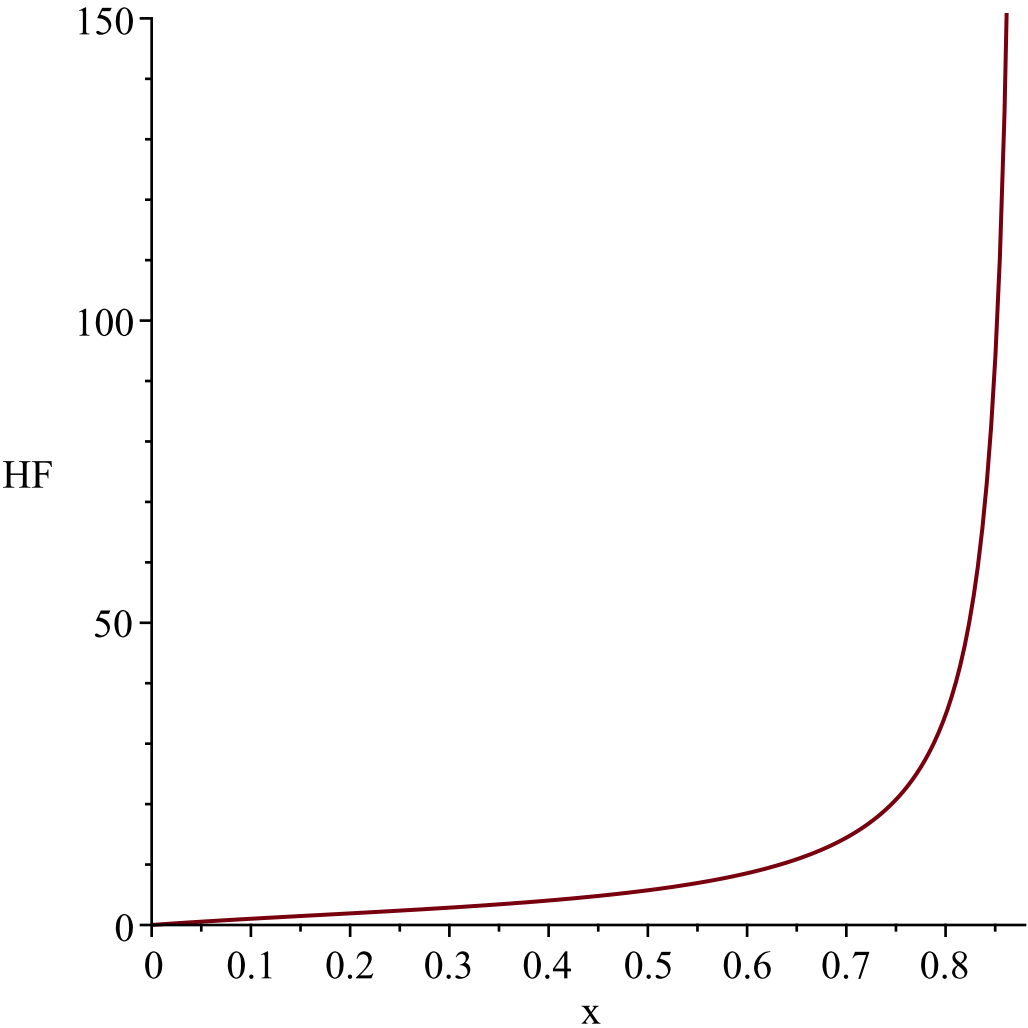
$Temp := \left[ \left[ y \sim \rightarrow -12 \sinh(y \sim) \cosh(y \sim) \left( -\cosh(y \sim)^2 + 2 \sinh(y \sim) \right) \right], \left[ 0, -\ln(\sqrt{2} - 1) \right], \right.$   
 $\left. ["Continuous", "PDF"] \right]$

*WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $-\ln(\sqrt{2} - 1)$*

*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,  $-\ln(\sqrt{2} - 1)$   
Resetting high to RV's maximum support value*



"i is", 14,  
 "-----"  
 "-----"

```

g := t→csch(t + 1)
l := 0
u := 1
Temp := ⌈⌊ y~→ 12 (-1 + arccsch(y~)) (-2 + arccsch(y~))² ⌋, ⌊ - 2 / (e⁻² - e²), - 2 / (-e + e⁻¹) ⌋,
["Continuous", "PDF"] ⌋

```

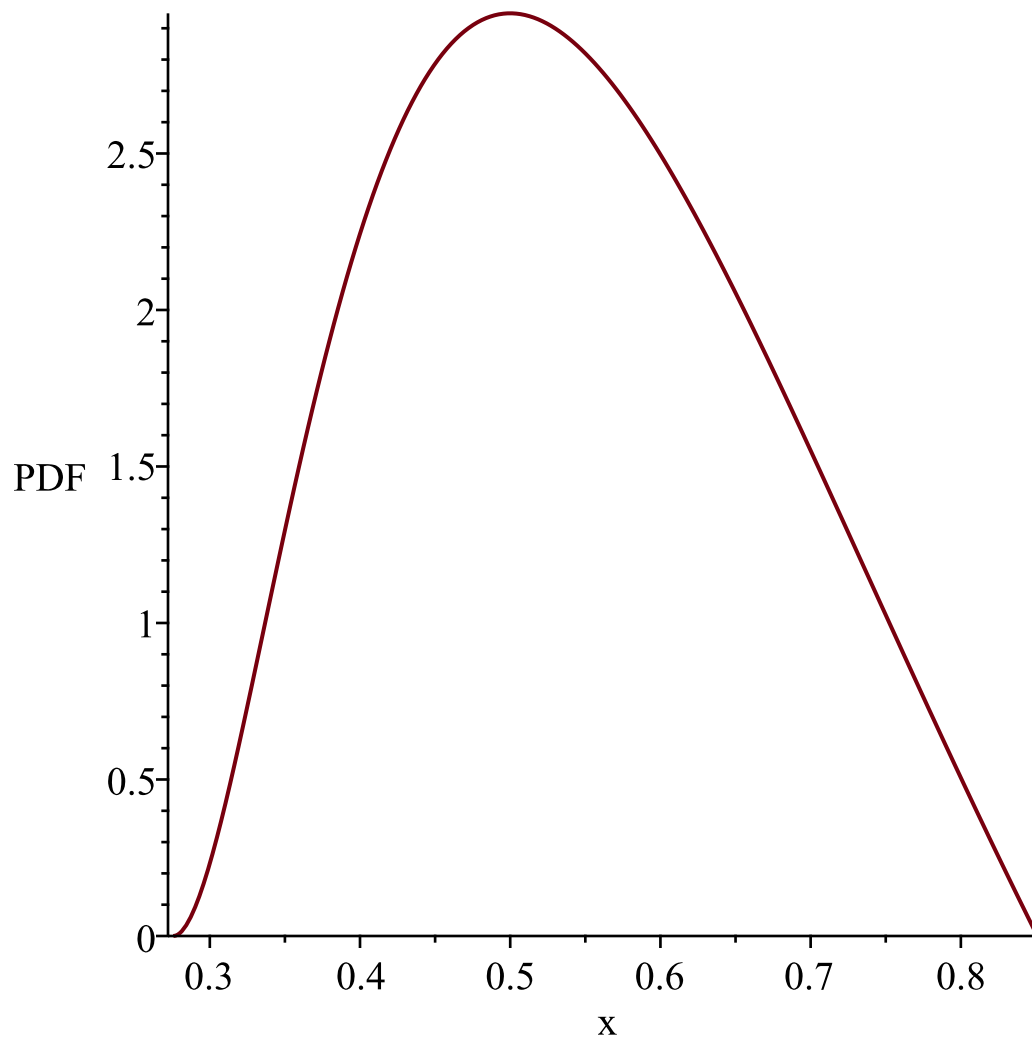
*WARNING(PlotDist): Low value provided by user, 0 is less than minimum support value of random variable*

$$-\frac{2}{e^{-2}-e^2}$$

*Resetting low to RV's minimum support value  
 WARNING(PlotDist): High value provided by user, 40*

is greater than maximum support value of the random  
variable,  $-\frac{2}{-e+e^{-1}}$

Resetting high to RV's maximum support value



*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

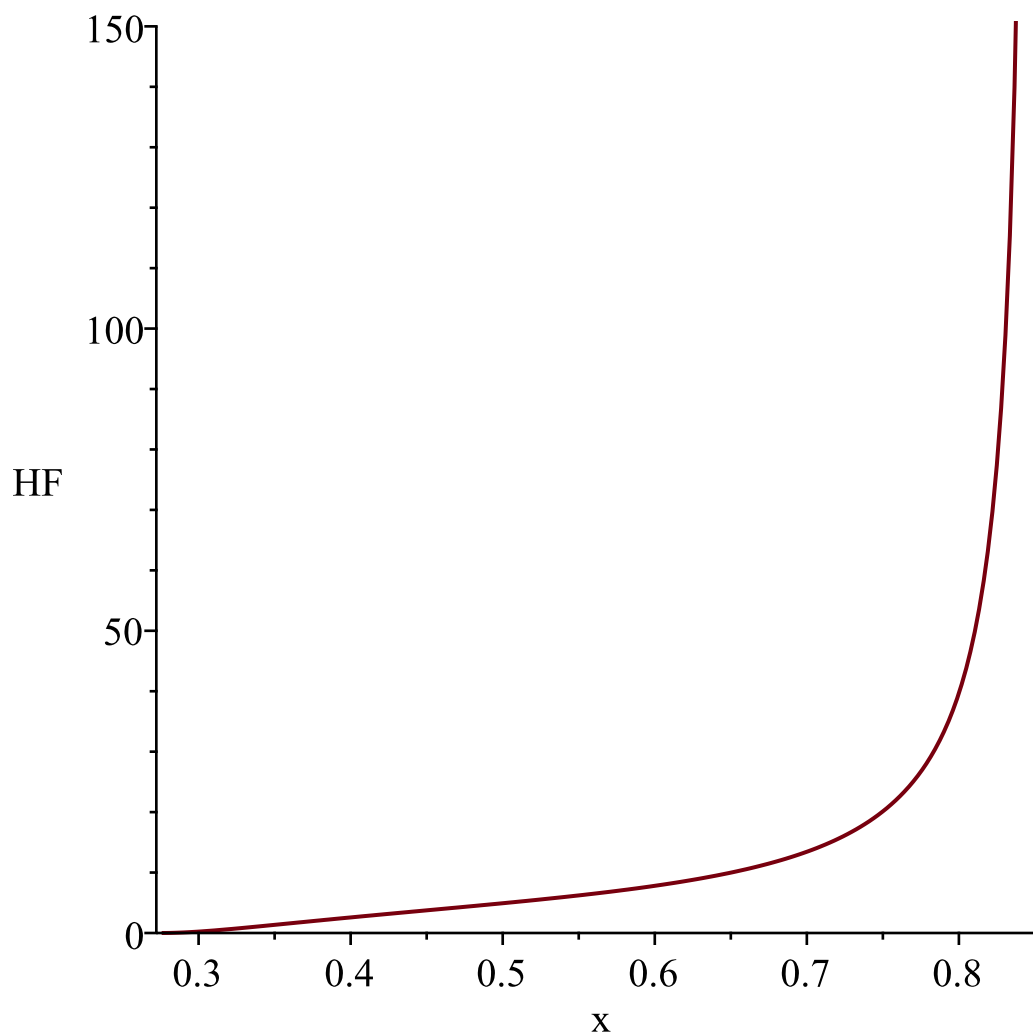
$$-\frac{2}{e^{-2}-e^2}$$

Resetting low to RV's minimum support value

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

$$\text{variable, } -\frac{2}{-e+e^{-1}}$$

Resetting high to RV's maximum support value



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

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

$$l := 0$$

$$u := 1$$

$$Temp := \left[ \left[ y \sim \rightarrow - \frac{12 \left( 4 \cosh(y \sim)^2 \sinh(y \sim) - 8 \cosh(y \sim)^2 + \sinh(y \sim) + 7 \right) \cosh(y \sim)}{\sinh(y \sim)^5} \right], \right.$$

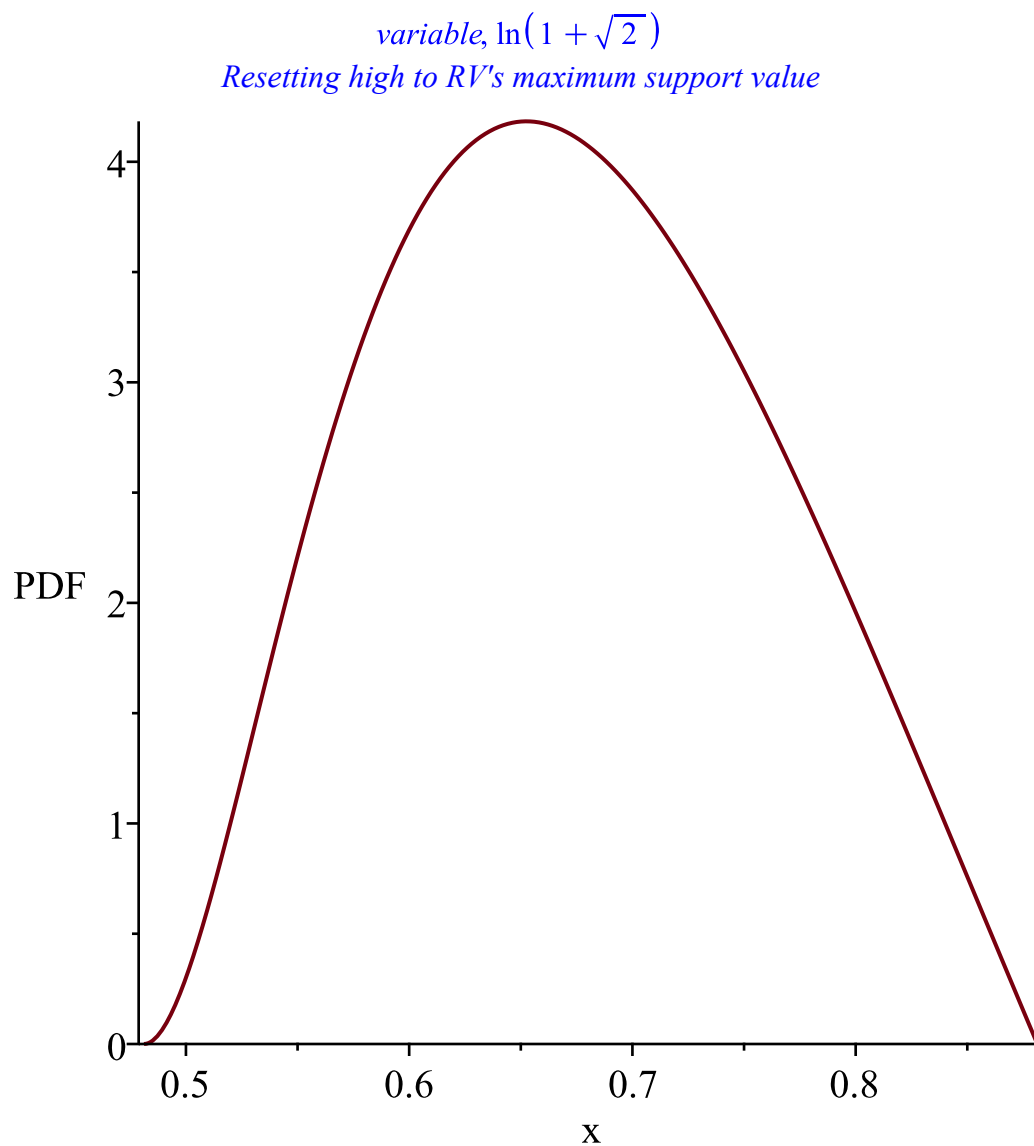
$$\left. \left[ \ln(2) - \ln(\sqrt{5} - 1), \ln(1 + \sqrt{2}) \right], ["Continuous", "PDF"] \right]$$

*WARNING(PlotDist): Low value provided by user, 0  
 is less than minimum support value of random variable*

$$\ln(2) - \ln(\sqrt{5} - 1)$$

*Resetting low to RV's minimum support value*

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



*WARNING(PlotDist): Low value provided by user, 0  
 is less than minimum support value of random variable*

$$\ln(2) - \ln(\sqrt{5} - 1)$$

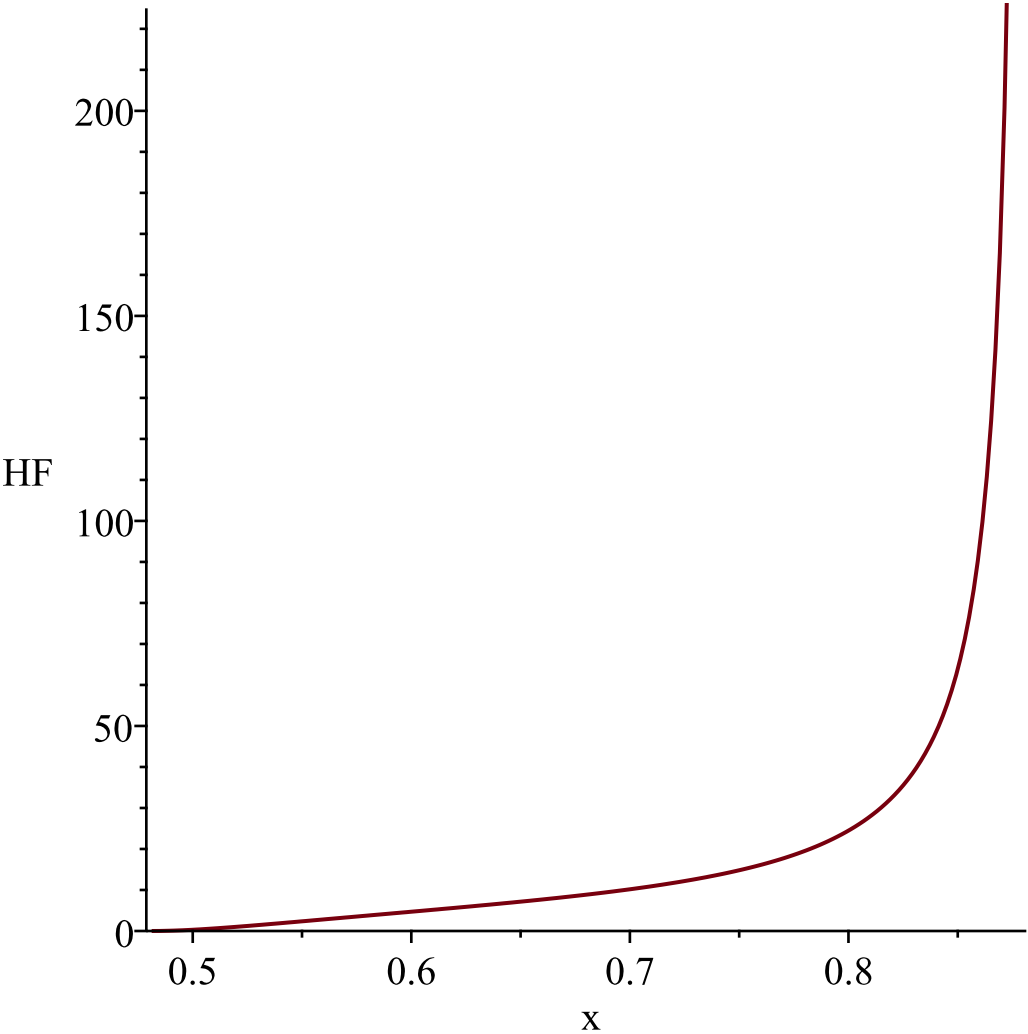
*Resetting low to RV's minimum support value*

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

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

*Resetting high to RV's maximum support value*





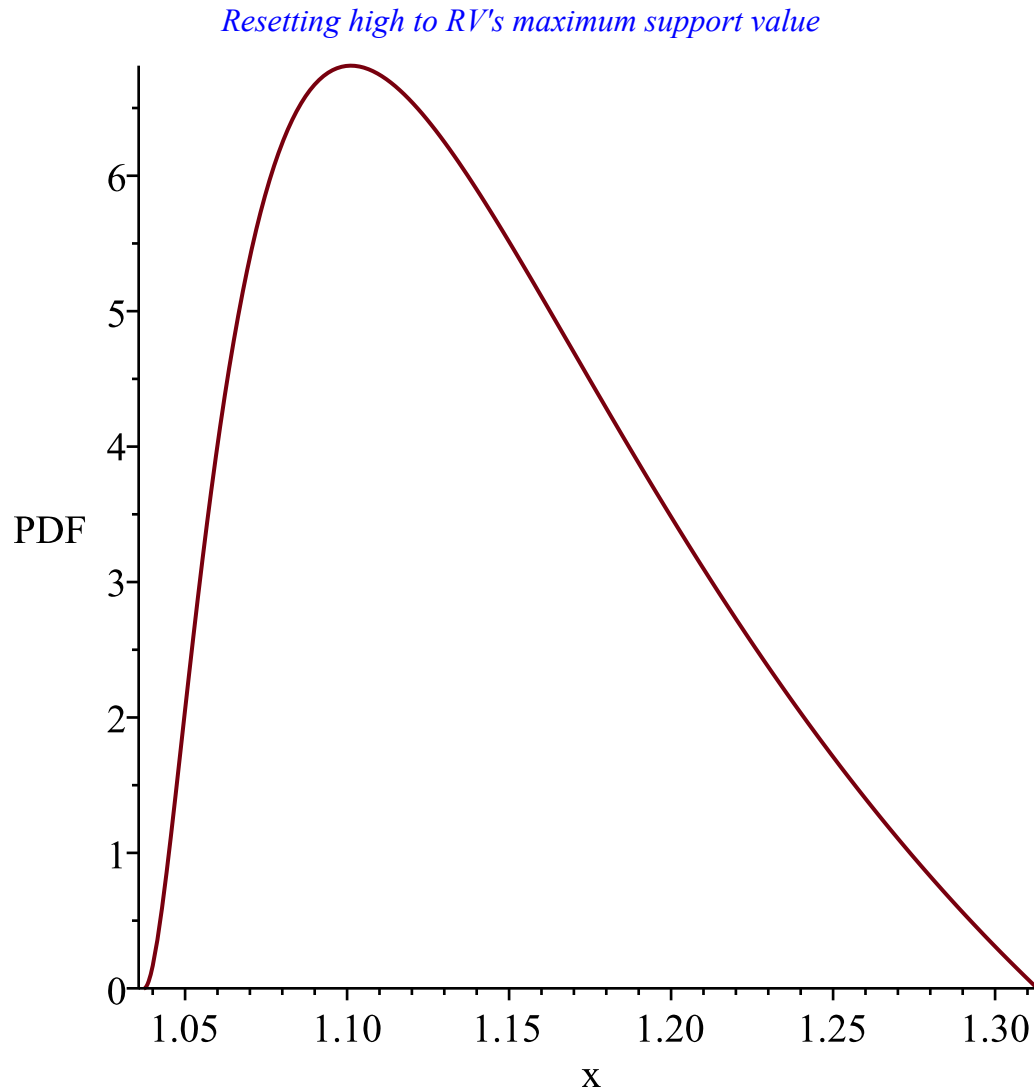
"i is", 16,  
 "-----"  
 "-----"

$$\begin{aligned}
 g &:= t \rightarrow \frac{1}{\tanh(t+1)} \\
 l &:= 0 \\
 u &:= 1 \\
 Temp &:= \left[ \left[ y \sim \rightarrow \frac{12 \left( -1 + \operatorname{arctanh} \left( \frac{1}{y \sim} \right) \right) \left( -2 + \operatorname{arctanh} \left( \frac{1}{y \sim} \right) \right)^2}{y \sim^2 - 1} \right], \left[ \frac{-e^{-2} - e^2}{e^{-2} - e^2}, \right. \right. \\
 &\quad \left. \left. \frac{e + e^{-1}}{e - e^{-1}} \right], ["Continuous", "PDF"] \right]
 \end{aligned}$$

*WARNING(PlotDist): Low value provided by user, 0  
 is less than minimum support value of random variable*

$$\frac{-e^{-2} - e^2}{e^{-2} - e^2}$$

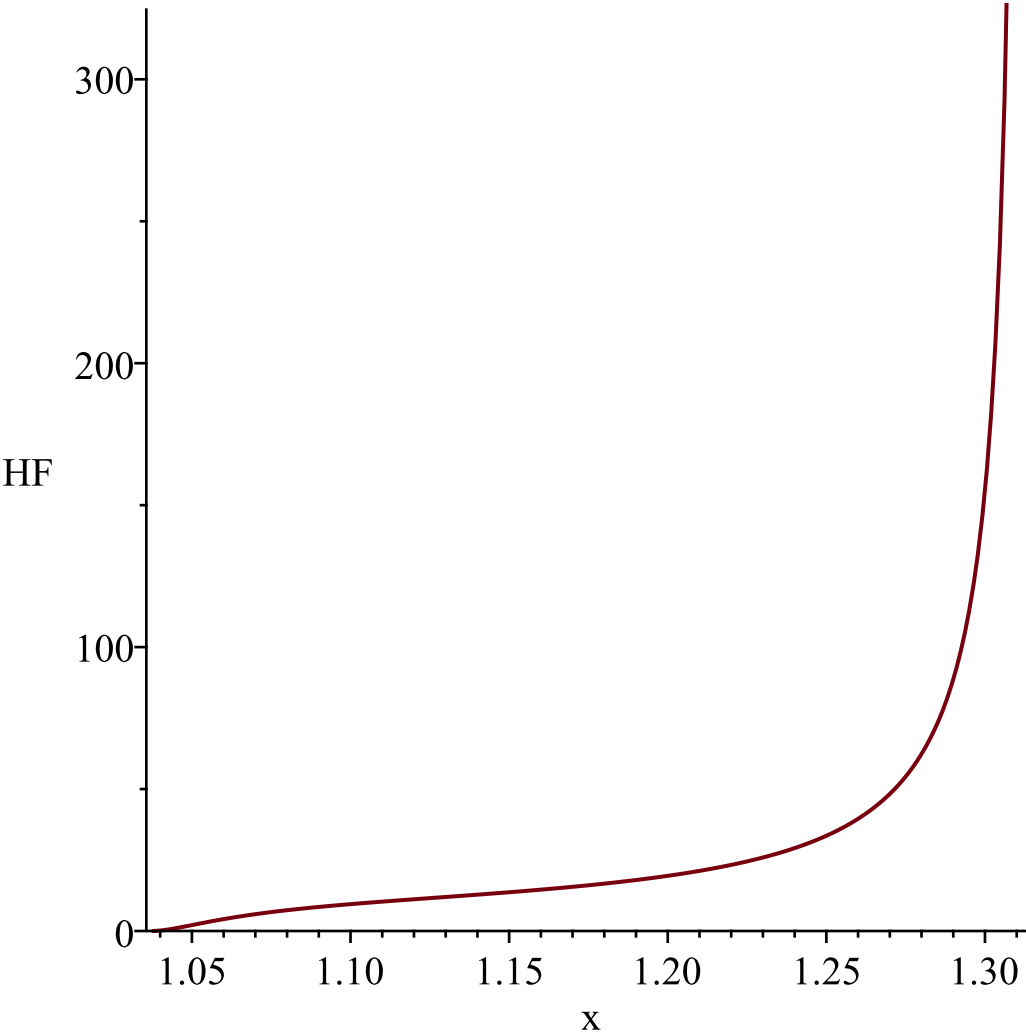
Resetting low to RV's minimum support value  
*WARNING(PlotDist): High value provided by user, 40  
 is greater than maximum support value of the random  
 variable,  $\frac{e+e^{-1}}{e-e^{-1}}$*



*WARNING(PlotDist): Low value provided by user, 0  
 is less than minimum support value of random variable  
 $\frac{-e^{-2}-e^2}{e^{-2}-e^2}$*

Resetting low to RV's minimum support value  
*WARNING(PlotDist): High value provided by user, 40  
 is greater than maximum support value of the random  
 variable,  $\frac{e+e^{-1}}{e-e^{-1}}$*

Resetting high to RV's maximum support value



"i is", 17,  
 "-----"  
 "-----"

$$\begin{array}{l}
 g:=t\rightarrow \frac{1}{\sinh(t+1)}\\
 l:=0\\
 u:=1\\
 Temp:=\left[\left[y\sim\rightarrow \frac{12\left(-1+\operatorname{arcsinh}\left(\frac{1}{y\sim}\right)\right)\left(-2+\operatorname{arcsinh}\left(\frac{1}{y\sim}\right)\right)^2}{\sqrt{y\sim^2+1}\left[y\sim\right]}\right],\left[-\frac{2}{e^{-2}-e^2},\right.\\
 \left.\frac{2}{e-e^{-1}}\right],["Continuous","PDF"]\right]
 \end{array}$$

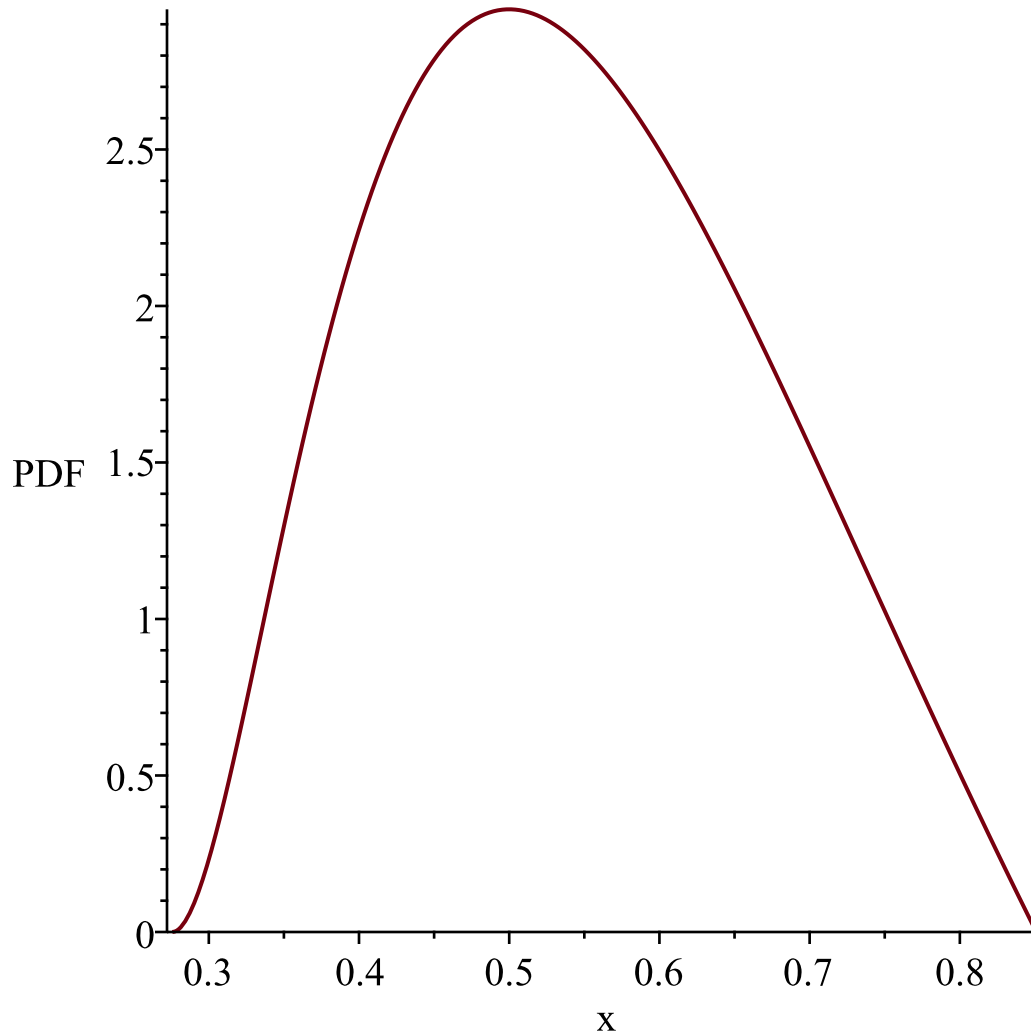
*WARNING(PlotDist): Low value provided by user, 0  
 is less than minimum support value of random variable*

$$-\frac{2}{e^{-2}-e^2}$$

*Resetting low to RV's minimum support value  
WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random*

$$\text{variable, } \frac{2}{e-e^{-1}}$$

*Resetting high to RV's maximum support value*



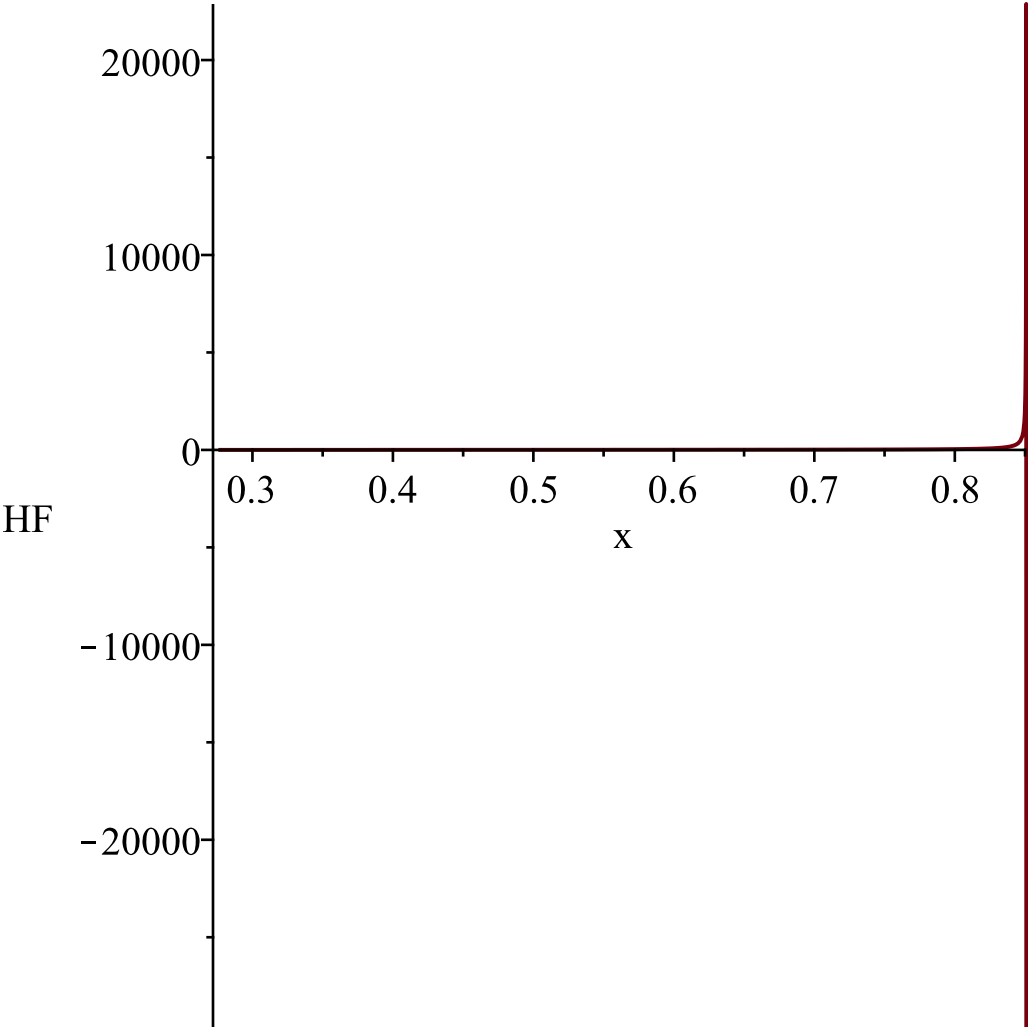
*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

$$-\frac{2}{e^{-2}-e^2}$$

*Resetting low to RV's minimum support value  
WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random*

$$\text{variable, } \frac{2}{e-e^{-1}}$$

Resetting high to RV's maximum support value



"i is", 18,  
"-----"  
-----"

$$g:=t\rightarrow \frac{1}{\operatorname{arcsinh}(t+1)}$$
$$l:=0$$
$$u:=1$$

$$Temp:=\left[\left[y_{\sim}\right.\right.\\ \left.\rightarrow \frac{12\left(\cosh\left(\frac{1}{y_{\sim}}\right)^2\sinh\left(\frac{1}{y_{\sim}}\right)-5\cosh\left(\frac{1}{y_{\sim}}\right)^2+7\sinh\left(\frac{1}{y_{\sim}}\right)+1\right)\cosh\left(\frac{1}{y_{\sim}}\right)}{y_{\sim}^2}\right],\left[\right.\\ \left.-\frac{1}{\ln\left(\sqrt{5}-2\right)},\frac{1}{\ln\left(1+\sqrt{2}\right)}\right],\left["Continuous","PDF"\right]\Bigg]$$

*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

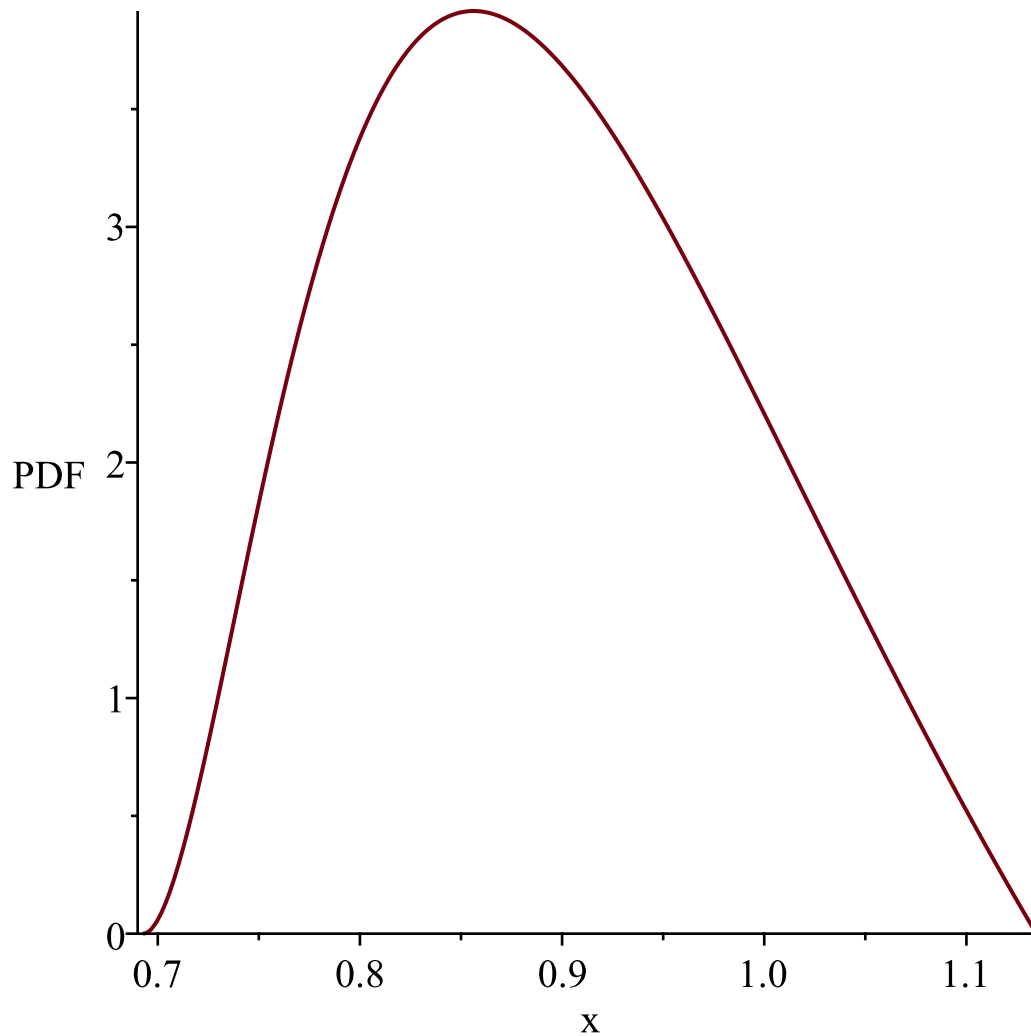
$$-\frac{1}{\ln(\sqrt{5}-2)}$$

*Resetting low to RV's minimum 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*



*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

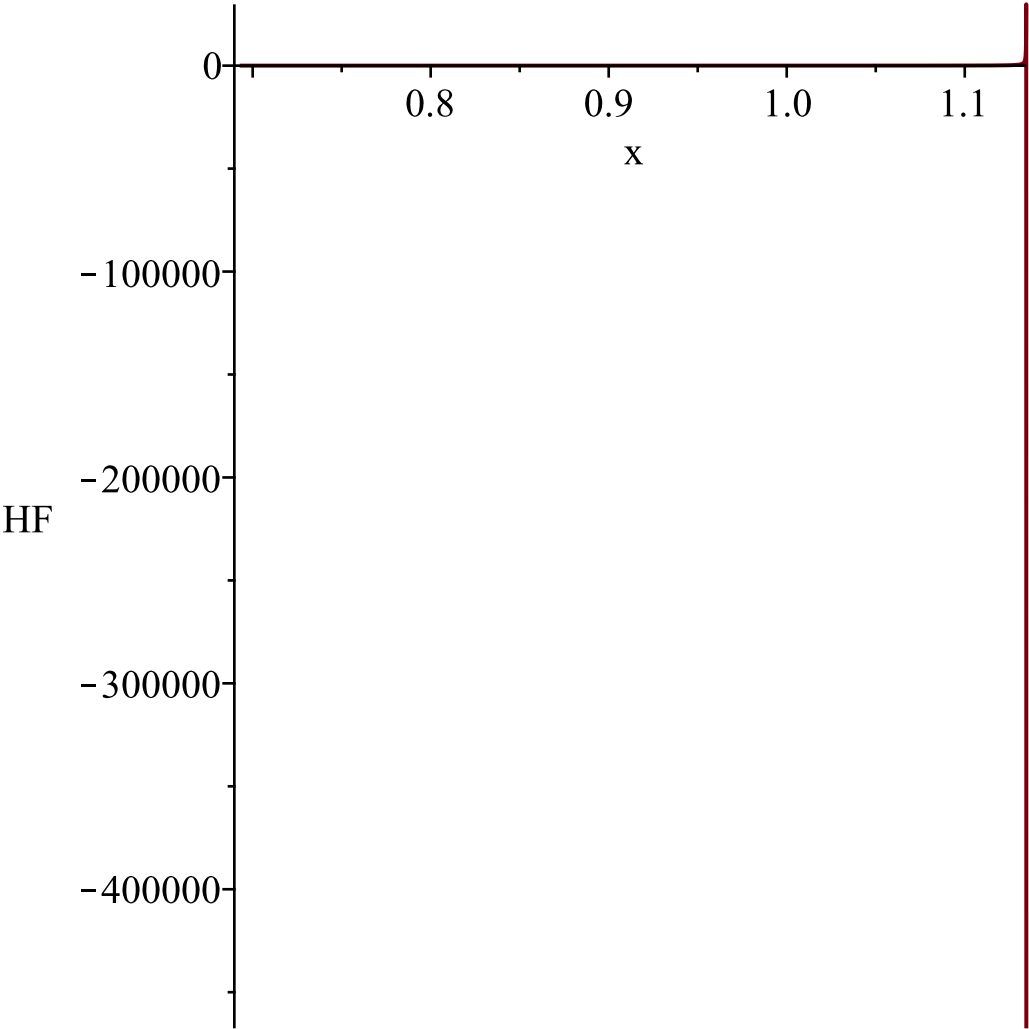
$$-\frac{1}{\ln(\sqrt{5}-2)}$$

*Resetting low to RV's minimum 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



"i is", 19,

"-----"

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

$$l:=0$$

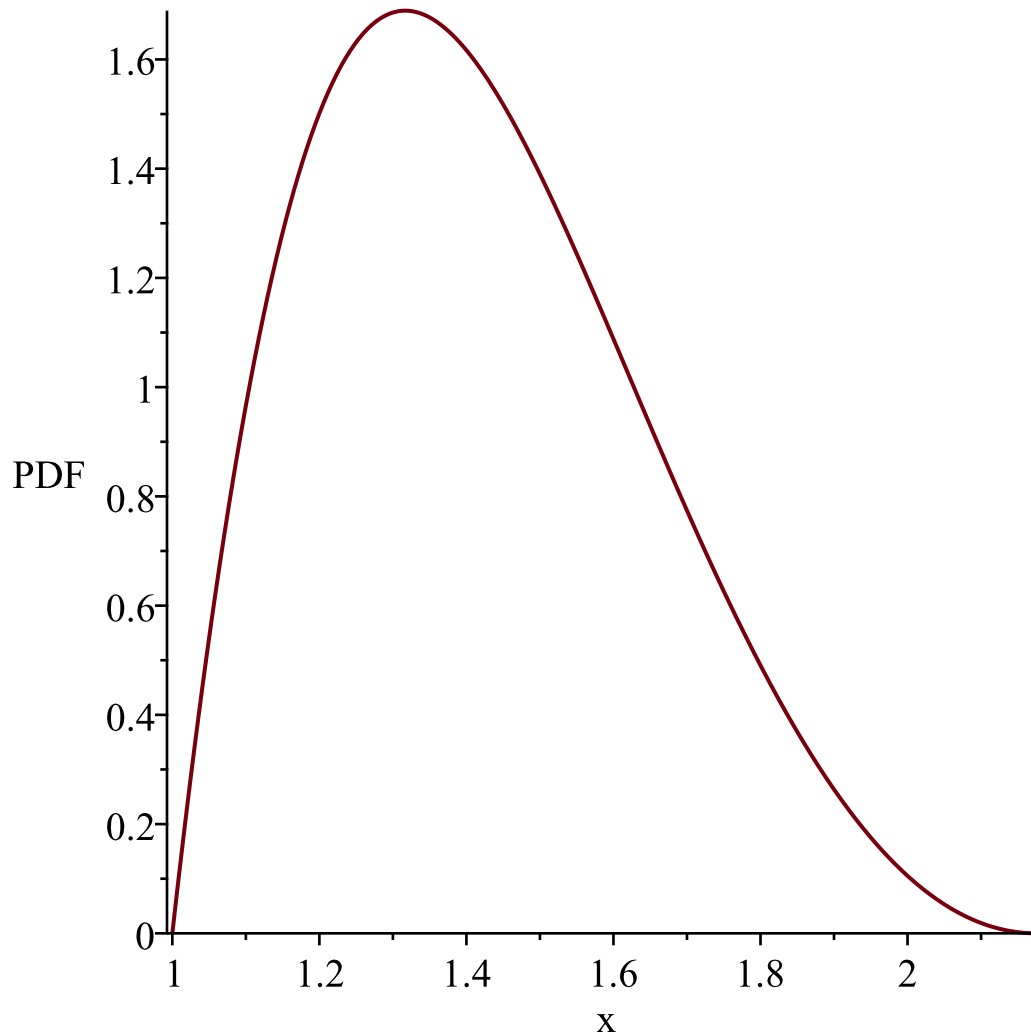
$$u:=1$$

$$Temp:=\left[\left[y\rightsquigarrow\frac{12\operatorname{arccsch}\left(\frac{1}{y\sim-1}\right)\left(-1+\operatorname{arccsch}\left(\frac{1}{y\sim-1}\right)\right)^2}{\sqrt{y\sim^2-2\,y\sim+2}}\right],\left[1,-\frac{1}{2}\,\mathrm{e}^{-1}+\frac{1}{2}\,\mathrm{e}\right.\\ \left.+1\right],\left[\text{"Continuous"},\text{"PDF"}\right]\right]$$

*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): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $-\frac{1}{2} e^{-1} + \frac{1}{2} e + 1$*

*Resetting high to RV's maximum support value*

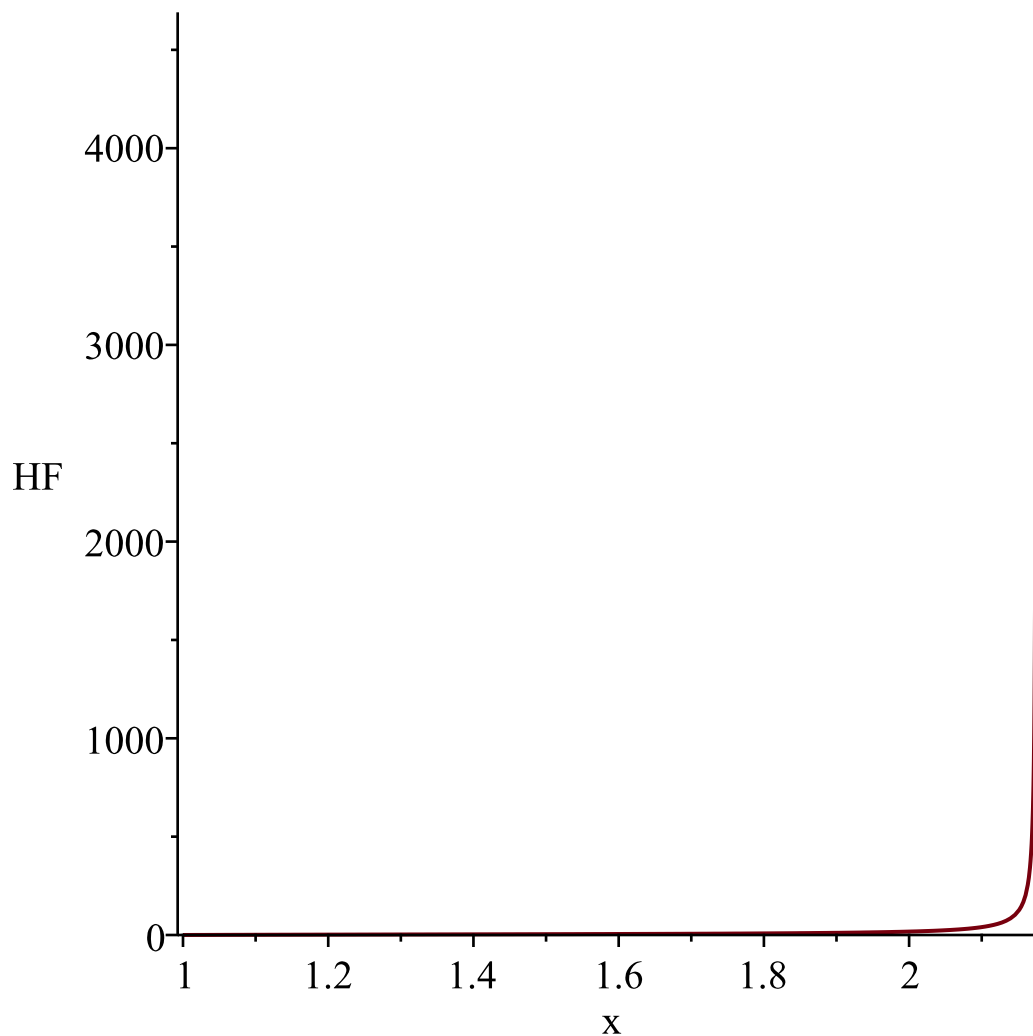


*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable  
1*

*Resetting low to RV's minimum support value  
WARNING(PlotDist): High value provided by user, 40  
is greater than maximum support value of the random  
variable,  $-\frac{1}{2} e^{-1} + \frac{1}{2} e + 1$*

*Resetting high to RV's maximum support value*





"i is", 20,

"-----"

$$g := t \rightarrow \tanh\left(\frac{1}{t}\right)$$

$$l := 0$$

$$u := 1$$

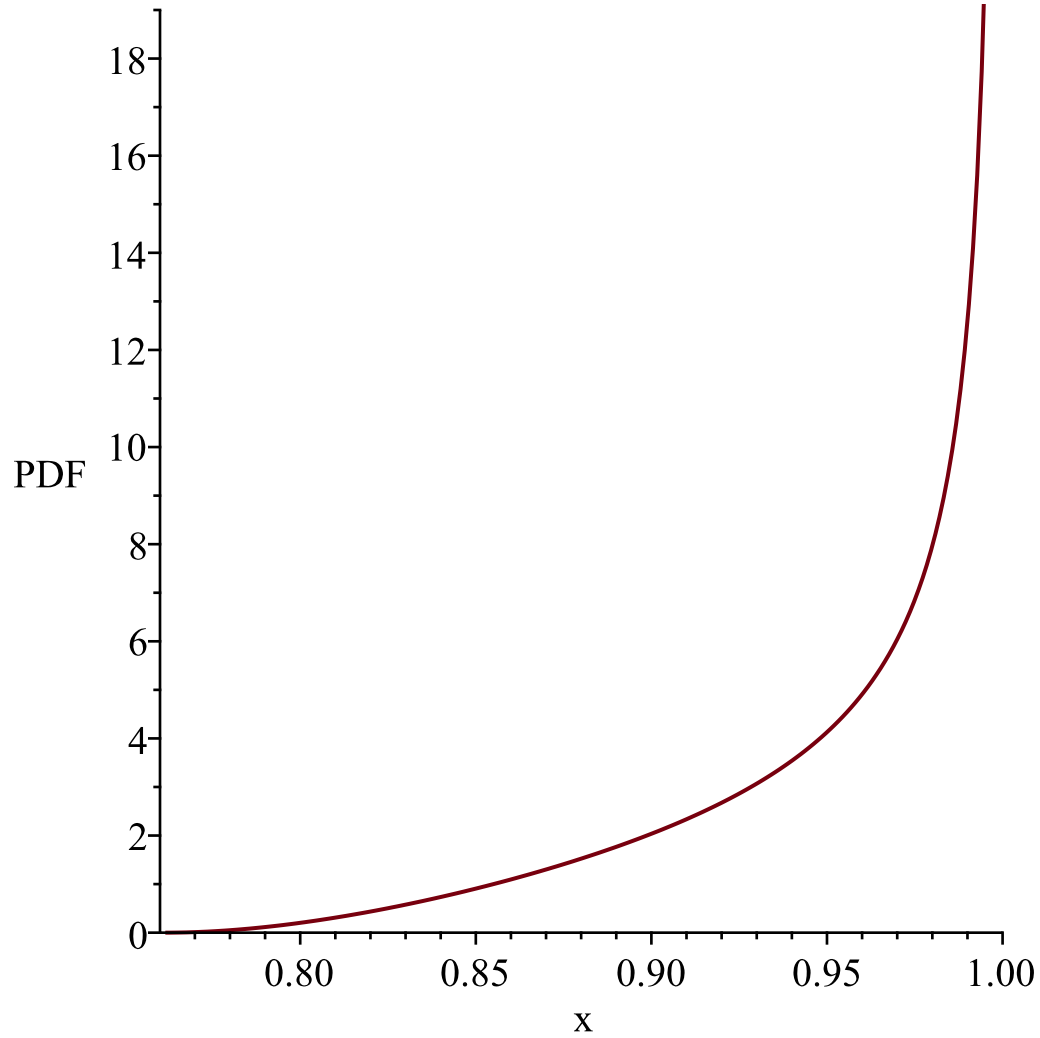
$$Temp := \left[ \left[ y \sim \rightarrow -\frac{12 (\operatorname{arctanh}(y \sim) - 1)^2}{\operatorname{arctanh}(y \sim)^5 (y \sim^2 - 1)} \right], \left[ \frac{e - e^{-1}}{e + e^{-1}}, 1 \right], ["Continuous", "PDF"] \right]$$

*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

$$\frac{e - e^{-1}}{e + e^{-1}}$$

*Resetting low to RV's minimum 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*



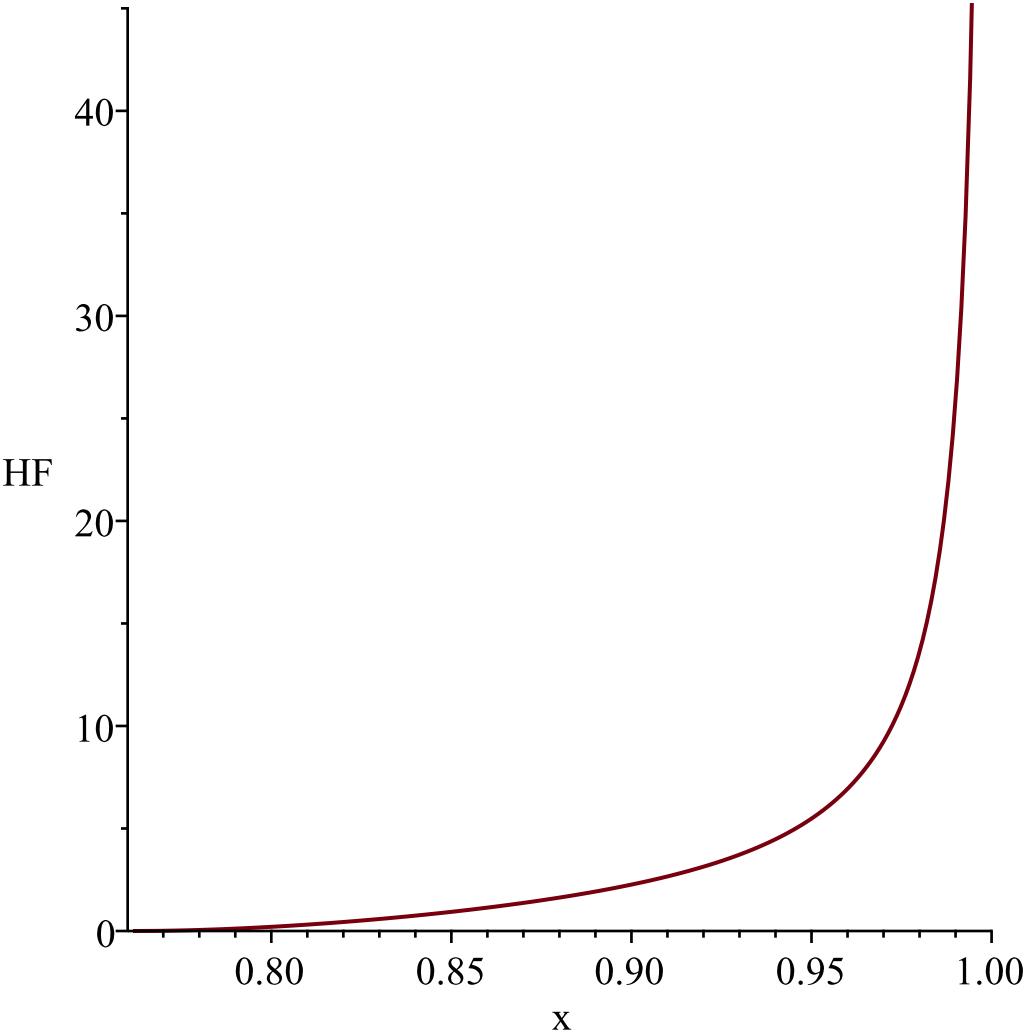
*WARNING(PlotDist): Low value provided by user, 0  
is less than minimum support value of random variable*

$$\frac{e - e^{-1}}{e + e^{-1}}$$

*Resetting low to RV's minimum 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*



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

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

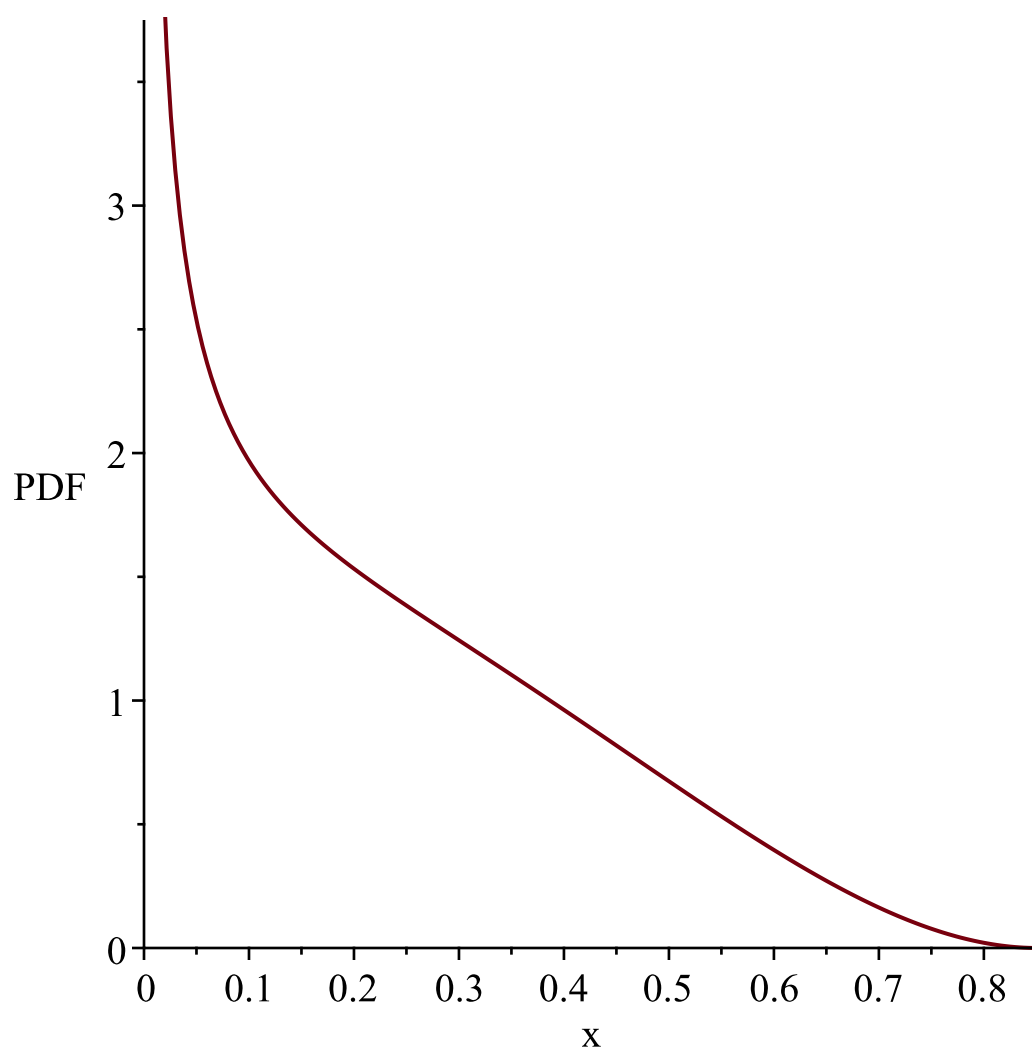
$$l := 0$$

$$u := 1$$

$$Temp := \left[ \left[ y \sim \rightarrow \frac{12 \left( \operatorname{arccsch}(y \sim) - 1 \right)^2}{\operatorname{arccsch}(y \sim)^5 \sqrt{y \sim^2 + 1} \mid y \sim} \right], \left[ 0, -\frac{2}{-e + e^{-1}} \right], ["Continuous", "PDF"] \right]$$

WARNING(PlotDist): High value provided by user, 40 is greater than maximum support value of the random variable,  $-\frac{2}{-e + e^{-1}}$

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*

$$\text{variable, } -\frac{2}{-e+e^{-1}}$$

*Resetting high to RV's maximum support value*

Warning, computation interrupted