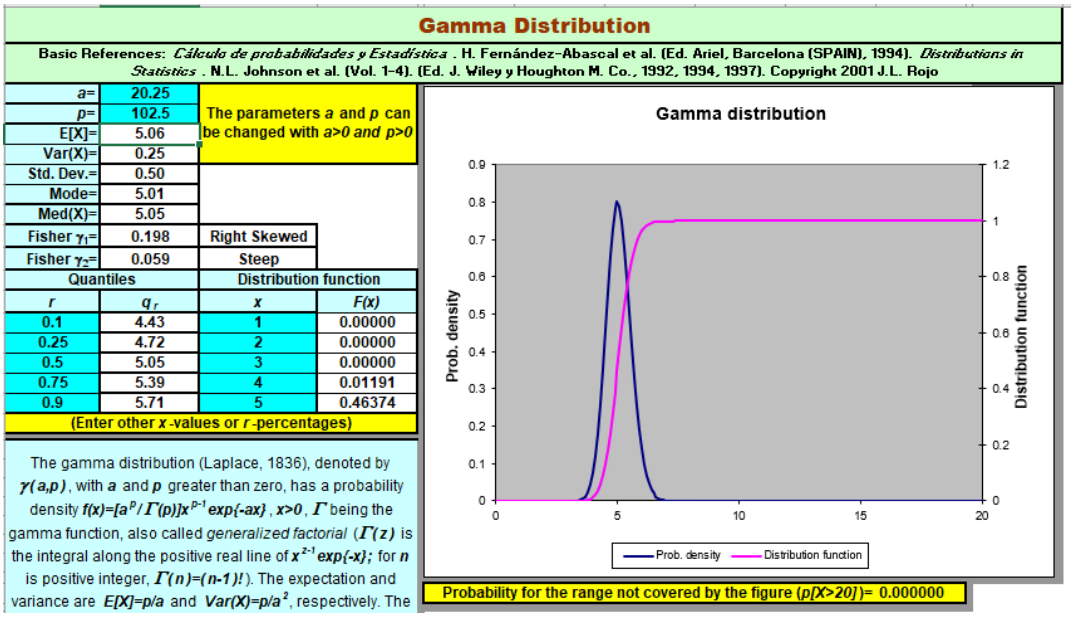
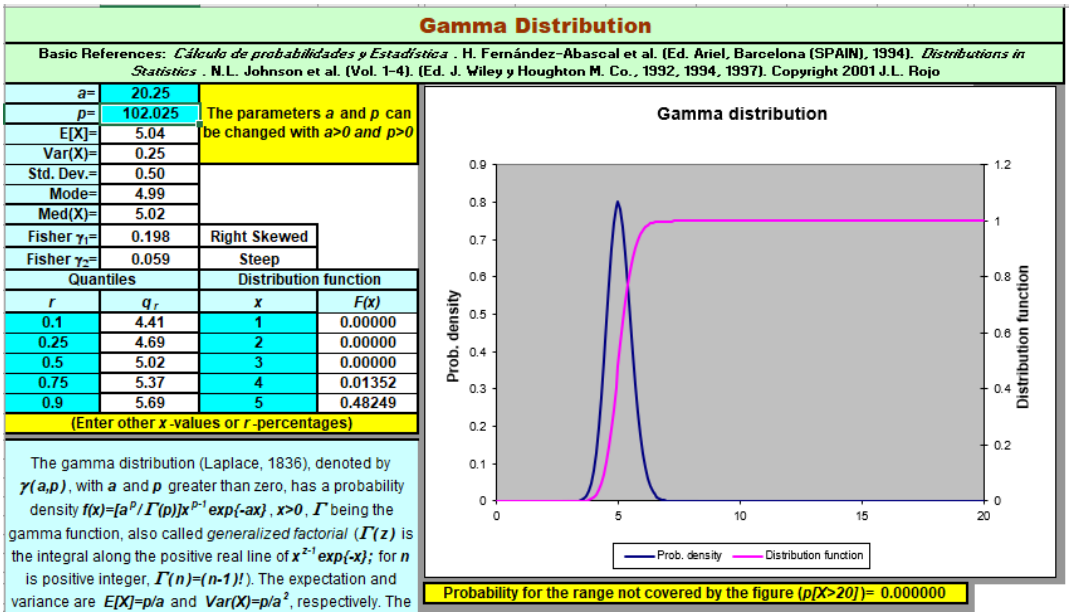
Plots:

The following plots display the reciprocal of my answers to problem 62:

Gamma(102.5, 20.25):

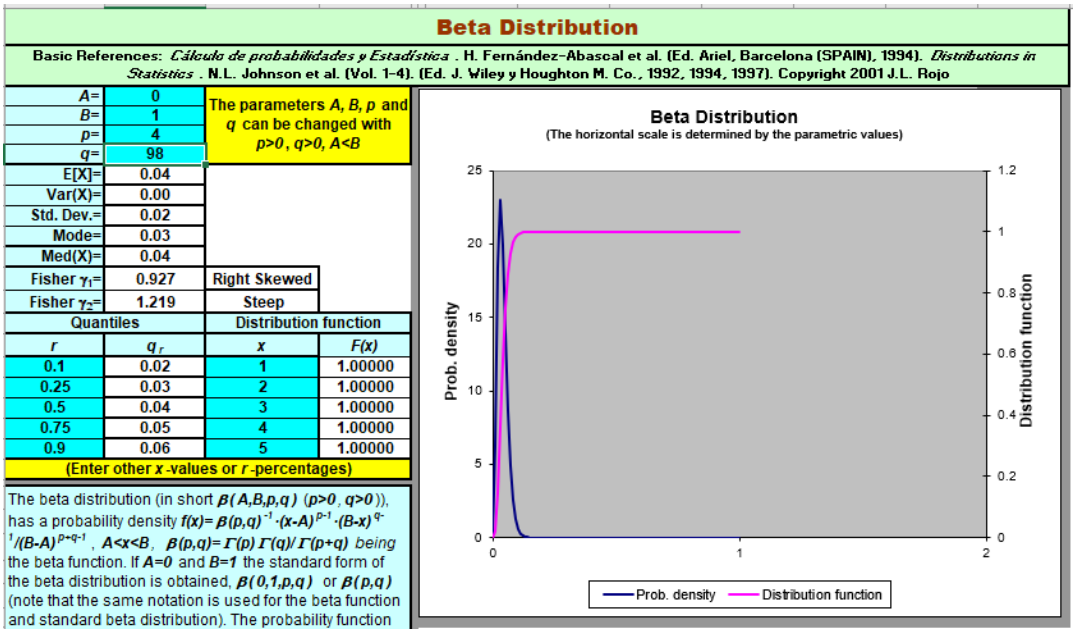


Gamma(102.025, 20.25):



The following plots are for problem 63:

Beta(4, 98):



Beta Distribution

Basic References: *Cálculo de probabilidades y Estadística* . H. Fernández-Abascal et al. (Ed. Ariel, Barcelona (SPAIN), 1994). *Distributions in Statistics* . N.L. Johnson et al. (Vol. 1-4). (Ed. J. Wiley y Houghton M. Co., 1992, 1994, 1997). Copyright 2001 J.L. Rojo

A=	0
B=	1
p=	4
q=	98
E[X]=	0.04
Var(X)=	0.00
Std. Dev.=	0.02
Mode=	0.03
Med(X)=	0.04
Fisher γ_1=	0.927
Fisher γ_2=	1.219

The parameters *A*, *B*, *p* and *q* can be changed with *p>0*, *q>0*, *A<B*

Right Skewed

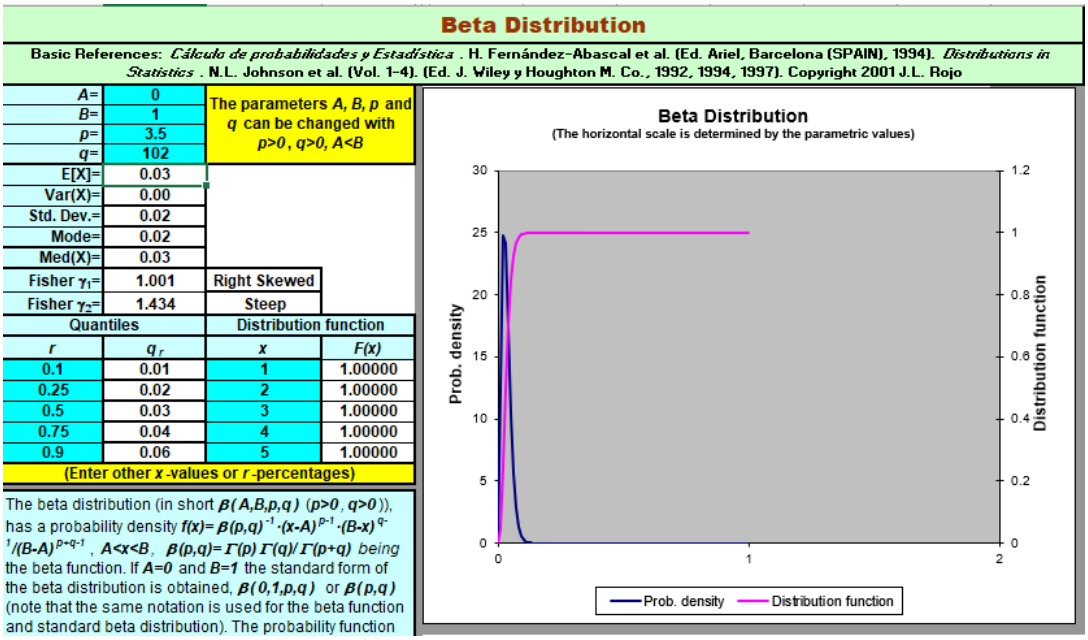
Steep

Quantiles		Distribution function	
r	q_r	*x*	*F(x)*
0.1	0.02	1	1.00000
0.25	0.03	2	1.00000
0.5	0.04	3	1.00000
0.75	0.05	4	1.00000
0.9	0.06	5	1.00000

(Enter other *x* -values or *r* -percentages)

The beta distribution (in short $\beta(A,B,p,q)$ ($p>0$, $q>0$)), has a probability density $f(x)=\beta(p,q)^{-1}\cdot(x-A)^{p-1}\cdot(B-x)^{q-1}/(B-A)^{p+q-1}$, $A<x<B$, $\beta(p,q)=\Gamma(p)\,\Gamma(q)/\Gamma(p+q)$ being the beta function. If $A=0$ and $B=1$ the standard form of the beta distribution is obtained, $\beta(0,1,p,q)$ or $\beta(p,q)$ (note that the same notation is used for the beta function and standard beta distribution). The probability function

Beta(3.5, 102):



Beta Distribution

Basic References: *Cálculo de probabilidades y Estadística* . H. Fernández-Abascal et al. (Ed. Ariel, Barcelona (SPAIN), 1994). *Distributions in Statistics* . N.L. Johnson et al. (Vol. 1-4). (Ed. J. Wiley y Houghton M. Co., 1992, 1994, 1997). Copyright 2001 J.L. Rojo

A=	0
B=	1
p=	3.5
q=	102
E[X]=	0.03
Var(X)=	0.00
Std. Dev.=	0.02
Mode=	0.02
Med(X)=	0.03
Fisher γ_1=	1.001
Fisher γ_2=	1.434

The parameters *A*, *B*, *p* and *q* can be changed with *p>0*, *q>0*, *A<B*

Right Skewed

Steep

Quantiles		Distribution function	
r	q_r	*x*	*F(x)*
0.1	0.01	1	1.00000
0.25	0.02	2	1.00000
0.5	0.03	3	1.00000
0.75	0.04	4	1.00000
0.9	0.06	5	1.00000

(Enter other *x* -values or *r* -percentages)

The beta distribution (in short $\beta(A,B,p,q)$ ($p>0$, $q>0$)), has a probability density $f(x)=\beta(p,q)^{-1}\cdot(x-A)^{p-1}\cdot(B-x)^{q-1}/(B-A)^{p+q-1}$, $A<x<B$, $\beta(p,q)=\Gamma(p)\,\Gamma(q)/\Gamma(p+q)$ being the beta function. If $A=0$ and $B=1$ the standard form of the beta distribution is obtained, $\beta(0,1,p,q)$ or $\beta(p,q)$ (note that the same notation is used for the beta function and standard beta distribution). The probability function