

Loi binomiale - calcul de $P(X=k)$

	TI-82 STATS, TI-83, TI-84	Casio Graph 35+/75/85/95 USB / Prizm fx-CG
Fonction à utiliser	<ul style="list-style-type: none"> binomFdp ou ddpbinom (calculatrice en français) binompdf (calculatrice en anglais) 	BinomialPD
Séquence de touches	<ul style="list-style-type: none"> Sur TI-82 STATS et TI-83: <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; background-color: #ffff00; color: black; font-weight: bold;">2nde</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">DISTR</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">var VARS</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">0</div> </div> Sur TI-84: <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; background-color: #ffff00; color: black; font-weight: bold;">2nde</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">DISTR</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">var VARS</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">alpha</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">TEST</div> <div style="border: 1px solid black; padding: 2px; background-color: #0000ff; color: white; font-weight: bold;">math</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORMAL FLOTT AUTO RÉEL RAD MP</p> <p style="font-weight: bold; text-align: center;">DISTR DESSIN</p> <p>8↑X²fdc(</p> <p>9:Fddp(</p> <p>0:Ffdc(</p> <p>ddpbinom(</p> <p>B:fdrbinom(</p> <p>C:ddpPoisson(</p> <p>D:fdrPoisson(</p> <p>E:ddpGéomét(</p> <p>F:fdrGéomét(</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORMAL FLOAT AUTO REAL RADIAN MP</p> <p style="font-weight: bold; text-align: center;">DISTR DRAW</p> <p>8↑X²cdf(</p> <p>9:Fpdf(</p> <p>0:Fcdf(</p> <p>binompdf(</p> <p>B:binomcdf(</p> <p>C:poissonpdf(</p> <p>D:poissoncdf(</p> <p>E:geometpdf(</p> <p>F:geometcdf(</p> </div> </div>	<div style="text-align: center; margin-bottom: 5px;">[OPTN] [F5] [F3] [F5] [F1]</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">Math Rad Norm1 d/c Real</p> <p style="font-weight: bold; text-align: center;">LIST MAT COMPLEX CALC STAT</p> <p style="font-size: small; text-align: center;">Math Rad Norm1 d/c Real</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">Math Rad Norm1 d/c Real</p> <p style="font-weight: bold; text-align: center;">DIST StdDev Var</p> <p style="font-size: small; text-align: center;">Math Rad Norm1 d/c Real</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORM t CHI F BINOMIAL</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">Bpd Bcd InvB</p> </div> </div>
Paramètres attendus dans l'ordre	n, p, k	k, n, p
Exemple : X suit une loi binomiale de paramètres $n=10$ et $p=0,3$ Calcul de $P(X=4)$:	<div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORMAL FLOTT AUTO RÉEL RAD MP</p> <p style="font-weight: bold; text-align: center;">ddpbinom</p> <p>nbreEssais:10</p> <p>p:0.3</p> <p>valeur de x:4</p> <p>Coller</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORMAL FLOAT AUTO REAL RADIAN MP</p> <p style="font-weight: bold; text-align: center;">binompdf</p> <p>trials:10</p> <p>p:0.3</p> <p>x value:4</p> <p>Paste</p> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORMAL FLOTT AUTO RÉEL RAD MP</p> <p style="font-weight: bold; text-align: center;">ddpbinom(10,0.3,4)</p> <p style="text-align: center;">.....200120949</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; text-align: center;">NORMAL FLOAT AUTO REAL RADIAN MP</p> <p style="font-weight: bold; text-align: center;">binompdf(10,0.3,4)</p> <p style="text-align: center;">.....200120949</p> </div> </div>	<div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p style="font-size: small; text-align: center;">Math Rad Norm1 d/c Real</p> <p style="font-weight: bold; text-align: center;">BinomialPD(4, 10, 0.3)</p> <p style="text-align: center; font-size: large;">0.200120949</p> <p style="font-size: small; text-align: center;">Bpd Bcd InvB</p> </div>

Loi binomiale - calcul de $P(X \leq k)$

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Fonction à utiliser	On utilise la fonction : <ul style="list-style-type: none"> • binomFRép (calculatrice en français) • binomcdf (calculatrice en anglais) 		BinomialCD
Séquence de touches	<ul style="list-style-type: none"> • Sur TI-82 STATS et TI-83 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> 2nde 2ND distrib DISTR var VARS alpha alpha texte tests TEST math </div> • Sur TI-84 : <div style="display: flex; justify-content: space-around; margin-top: 5px;"> 2nde 2ND distrib DISTR var VARS alpha alpha texte angle apps </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; margin: 0;">NORMAL FLOTT AUTO RÉEL RAD MP</p> <p style="font-size: small; margin: 0;">DISTR DESSIN</p> <p style="font-size: small; margin: 0;">8↑X²fdc(</p> <p style="font-size: small; margin: 0;">9:Fddp(</p> <p style="font-size: small; margin: 0;">0:Ffdc(</p> <p style="font-size: small; margin: 0;">A:ddpbinom(</p> <p style="font-size: small; margin: 0;">B:fdrbinom(</p> <p style="font-size: small; margin: 0;">C:ddpPoisson(</p> <p style="font-size: small; margin: 0;">D:fdrPoisson(</p> <p style="font-size: small; margin: 0;">E:ddp9éomét(</p> <p style="font-size: small; margin: 0;">F:fdr9éomét(</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; margin: 0;">NORMAL FLOAT AUTO REAL RADIAN MP</p> <p style="font-size: small; margin: 0;">DISTR DRAW</p> <p style="font-size: small; margin: 0;">8↑X²cdf(</p> <p style="font-size: small; margin: 0;">9:Fpdf(</p> <p style="font-size: small; margin: 0;">0:Fcdf(</p> <p style="font-size: small; margin: 0;">A:binompdf(</p> <p style="font-size: small; margin: 0;">B:binomcdf(</p> <p style="font-size: small; margin: 0;">C:poissonpdf(</p> <p style="font-size: small; margin: 0;">D:poissoncdf(</p> <p style="font-size: small; margin: 0;">E:geometpdf(</p> <p style="font-size: small; margin: 0;">F:geometcdf(</p> </div> </div>		<div style="text-align: center; margin-bottom: 5px;">[OPTN] [F5] [F3] [F5] [F2]</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; margin: 0;">Math Rad Norm1 d/c Real</p> <p style="font-size: small; margin: 0;">LIST MAT COMPLEX CALC STAT</p> <p style="font-size: small; margin: 0;">Math Rad Norm1 d/c Real</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; margin: 0;">Math Rad Norm1 d/c Real</p> <p style="font-size: small; margin: 0;">x̄ ȳ DIST StdDev Var</p> <p style="font-size: small; margin: 0;">Math Rad Norm1 d/c Real</p> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; margin: 0;">NORM t CHI F BINOMIAL</p> </div> <div style="width: 48%; border: 1px solid black; padding: 2px;"> <p style="font-size: small; margin: 0;">Bpd Bcd InvB</p> </div> </div>
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