Binomialverteilung

p: Erfolgswahrscheinlichkeit
q = 1 - p: Misserfolgswahrscheinlichkeit

LS S. 361 Nr.4b

X: Anzahl der Erfolge
Y: Anzahl der Misserfolge

n =	100	P(X = a)
p =	0,03	q = 0,97
a =	4	n - a = 96
b =		

P(X = 4)

= P(X <= 4) - P(X <= 3)
= 0,8179 - 0,6472 = 0,1706

n =	100	P(X <= a)
p =	0,03	q = 0,97
a =	4	n - a = 96
b =		

P(X <= 4)

= 0,8179

n =	100	P(X >= a)
p =	0,03	q = 0,97
a =	3	n - a = 97
b =		

P(X >= 3)

= 1 - P(X <= 2)
= 1,0000 - 0,4198 = 0,5802

n =	100	P(a <= X <= b)
p =	0,03	q = 0,97
a =	1	n - a = 99
b =	5	n - b = 95

P(1 <= X <= 5)

= P(X <= 5) - P(X <= 0)
= 0,9192 - 0,0476 = 0,8716

n =	100	P(a <= X <= b)
p =	0,03	q = 0,97
a =	2	n - a = 98
b =	4	n - b = 96

P(2 <= X <= 4)

= P(X <= 4) - P(X <= 1)
= 0,8179 - 0,1946 = 0,6232

n =		P(X <= a)
p =		
a =		
b =		

P(X <=1 oder X >=5) = 1 - P(2 <= X <= 4) = 1 - 0,6232 = 0,3768