Binomialverteilung

p: Erfolgswahrscheinlichkeit
q = 1 - p: Misserfolgswahrscheinlichkeit

X: Anzahl der Erfolge
Y: Anzahl der Misserfolge

LS S. 361 Nr.4a

n =	50	P(X = a)
p =	0,05	q = 0,95
a =	4	n - a = 46
b =		

P(X = 4)

= P(X <= 4) - P(X <= 3)
= 0,8964 - 0,7604 = 0,1360

n =	50	P(X <= a)
p =	0,05	q = 0,95
a =	4	n - a = 46
b =		

P(X <= 4)

= 0,8964

n =	50	P(X >= a)
p =	0,05	q = 0,95
a =	3	n - a = 47
b =		

P(X >= 3)

= 1 - P(X <= 2)
= 1,0000 - 0,5405 = 0,4595

n =	50	P(a <= X <= b)
p =	0,05	q = 0,95
a =	1	n - a = 49
b =	5	n - b = 45

P(1 <= X <= 5)

= P(X <= 5) - P(X <= 0)
= 0,9622 - 0,0769 = 0,8853

n =	50	P(a <= X <= b)
p =	0,05	q = 0,95
a =	2	n - a = 48
b =	4	n - b = 46

P(2 <= X <= 4)

= P(X <= 4) - P(X <= 1)
= 0,8964 - 0,2794 = 0,6170

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

P(X <= 1 oder X >= 5) = 1 - P(2 <=X <=4) = 1 - 0,6170 = 0,383