

LS 10 S 144 Nr. 1

$$n = 25; p = 0$$

1.) a)  $P(X \leq 3) \approx \underline{\underline{0,2340}}$  gerundet auf 4. Stelle

Eingabe mit TI-30X Plus [2nd] [stat-reg/distr]

<DISTR> <Binomial **cdf**> <Single> Trials = 25; p = 0,2; X = 3

b)  $P(X \leq 6) \approx \underline{\underline{0,7800}}$

c)  $P(X = 7) \approx \underline{\underline{0,1108}}$  Eingabe wie a) nur mit Binomial **pdf**

d)  $P(X \leq 4) \approx \underline{\underline{0,4207}}$ ; e)  $P(X = 5) \approx \underline{\underline{0,1960}}$

f)  $P(X \leq 9) \approx \underline{\underline{0,9827}}$  g)  $P(X = 9) \approx \underline{\underline{0,0294}}$

h)  $P(X \leq 1) \approx \underline{\underline{0,0274}}$  i)  $P(X \leq 8) \approx \underline{\underline{0,9532}}$

j)  $P(X \leq 2) \approx \underline{\underline{0,0982}}$  k)  $P(X = 0) = \binom{15}{0} \cdot 0,2^0 \cdot 0,8^{25} \approx \underline{\underline{0,0038}}$

l)  $P(X \leq 15) \approx \underline{\underline{1,0000}}$

2.) a)  $n = 30; p = 0,3 \rightarrow X$  ist  $B_{30,0,3}$  verteilt

$P(X < 8) = P(X \leq 7) \approx \underline{\underline{0,2814}}$

b)  $n = 50; p = 0,5; P(X \leq 28) \approx \underline{\underline{0,8389}}$

c)  $n = 8; p = \frac{1}{5}; P(X < 3) = P(X \leq 2) \approx \underline{\underline{0,7969}}$

d)  $n = 14; p = \frac{5}{6}; P(X \leq 10) \approx \underline{\underline{0,1937}}$

e)  $n = 100; p = 0,9; P(X < 95) = P(X \leq 94) \approx \underline{\underline{0,9424}}$

f)  $n = 80; p = \frac{1}{3}; P(X < 30) = P(X \leq 29) \approx \underline{\underline{0,7514}}$