

# Discrete Random Variables

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## 4.5 Using the Binomial Table

1. Use the binomial table to calculate the following binomial probability:  
 $P(X \leq 9)$  for  $n = 12, p = 0.60$ .
2. Use the binomial table to calculate the following binomial probability:  
 $P(X \geq 11)$  for  $n = 15, p = 0.40$ .
3. Use the binomial table to calculate the following binomial probability:  
 $P(X > 5)$  for  $n = 10, p = 0.70$ .

Answers:

1.  $P(X \leq 9) = 0.917$
2.  $P(X \geq 11) = 1 - P(X \leq 10) = 1 - 0.991 = 0.009$
3.  $P(X > 5) = 1 - P(X \leq 5) = 1 - 0.150 = 0.850$