

# Notes 4.3 More Discrete Probability Distributions

## I. The Geometric Distribution

There are three conditions that must be satisfied in order for a probability experiment to be a geometric distribution:

1. 2. 3.
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The probability that the first success will occur on trial number  $x$  is:

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### Example 1:

From experience, you know that the probability that you will make a sale on any given telephone call is 0.23. Find each of the following probability

- your first sale on any given day will occur on your seventh call.
- your first sale on any given day will occur on your fourth or fifth sales call.
- your first sale on any given day will occur before your third call.

**Assignment: New textbook: pgs 227 – 228/ 17, 18, 20, 27**

**Old textbook: pgs 182 – 183/ 5, 6, 13**