Serendipity

The word serendipity comes from the Persian fairy tale of the [Three Princes of Serendip](#)

Problem

What is the probability of a seredipitous encounter with a friend? Imagine you are live in an area with a large general population (eg Stanford with 17,000 students). A small subset of the population are friends. What are the chances that you run into at least one friend if you see a handful of people from the population? Assume that seeing each person from the population is equally likely.

Total Population

> 17000

Friends

> 150

People that you see

> 100

Calculate

Answer

The probability that you see at least one friend is: