

# Stat 140 Binomial Example

*Evan Ray*

*October 23, 2017*

## **Binomial example (adapted from SDM4 16.41)**

An orchard owner knows that he will have to use about 6% of the apples he harvests for cider because they will have bruises or blemishes. He expects a tree to produce about 300 apples.

**(a) Is a binomial model appropriate?**

**(b) If a binomial model were appropriate, what would the expected value and standard deviation of the number of cider apples on the tree be?**

**(c) Use R to calculate the probability that there will be no more than 12 cider apples.**