We will be constructing confidence intervals for the proportion of each color as well as the mean number of candies per bag.  Use the methods of 6.3 for the proportions and 6.1 for the mean.

**If calculating by hand, be sure to keep at least 4-6 decimal places for the sample proportions to eliminate large rounding errors.**

Construct a 95% Confidence Interval for the proportion of blue M&Ms® candies.

 Construct a 95% Confidence Interval for the proportion of orange M&Ms® candies.

 Construct a 95% Confidence Interval for the proportion of green M&Ms® candies.

Construct a 95% Confidence Interval for the proportion of yellow M&Ms® candies.

Construct a 95% Confidence Interval for the proportion of red M&Ms® candies.

Construct a 95% Confidence Interval for the proportion of brown M&Ms® candies.

Construct a 95% Confidence Interval for the mean total number of candies (large samples).

How many candies should be sampled to obtain a 95% CI of the proportion of blue candies with a 4% margin of error if the known proportion of blue candies is 0.24?