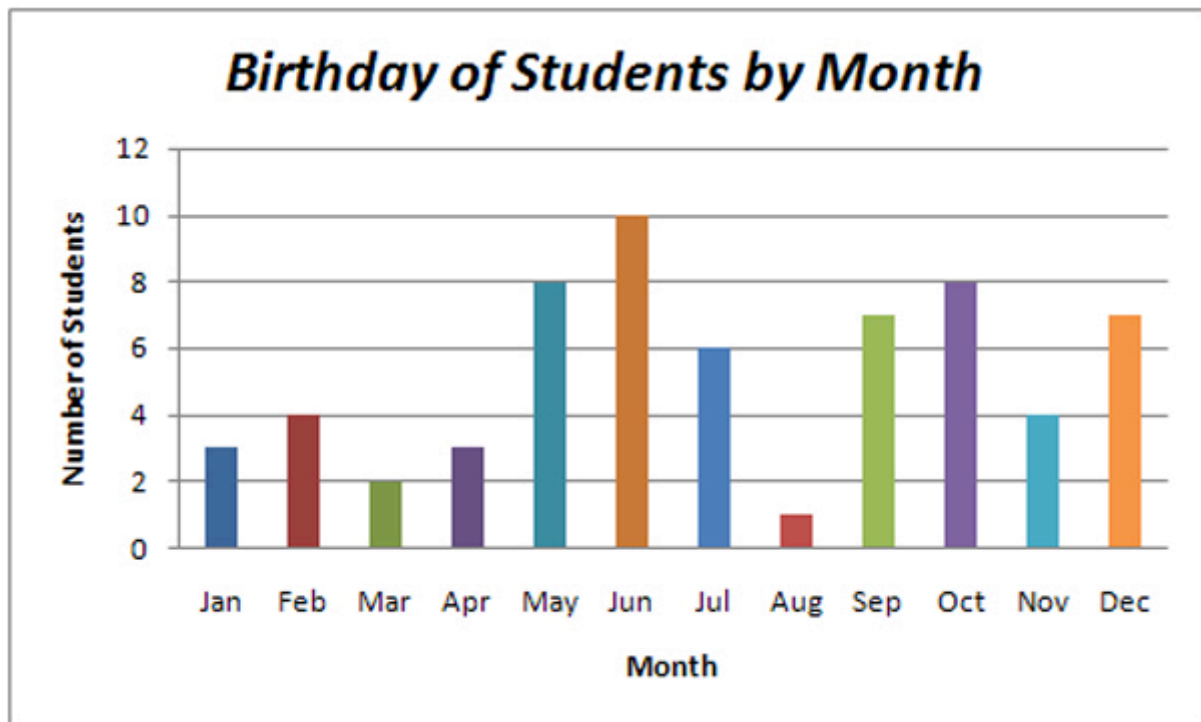# L2 Probability Checkpoint 1: Probability Concepts

Name:

A random sample of 63 students were surveyed and asked which month their birthday was in. The results are shown in the table below.

Birthday of Students by Month

a) What is the probability that a randomly chosen student has a birthday in December?

b) If a birthday is equally likely to occur on any day during the year, what is the theoretical probability that a student has a birthday in December?

c) Compare the theoretical probability that a student has a birthday in December in part (b), with the probability found in

	part (a). Explain any differences.	
d)	What is the probability that a student selected randomly does NOT have a birthday in February?	
e)	What is the probability that a student selected at random, has a birthday in the second half of the year?	
f)	What is the probability that a student whose birthday is in summer (December, January or February), has a birthday in February?	

g) If there are 580 students at a school, how many would you expect to have a birthday in August, based on the data above?