

The teams of major league baseball are divided into two leagues, the American League and the National League. The percentage of regular season games won by the individual teams in each of these leagues for the 2001 season is given below.

American League: 51, 45, 49, 63, 71, 38, 40, 56, 39, 40, 50, 59, 52, 46.

National League: 38, 57, 42, 40, 45, 48, 55, 56, 53, 50, 54, 53, 54, 42, 46, 57.

- What is the probability that a randomly selected team is a member of the American Baseball League?
- What is the probability that a randomly selected team won at least 60% of its regular season games given the team is not a member of the American League?
- What is the probability that a randomly selected team won no more than 60% of its regular season games?
- What is the probability the percentage of regular season games won by a randomly selected team is highest within its league?
- What is the probability that the percentage of regular season games won by a randomly selected team is lowest given the team is a member of the American League?
- What is the probability that a randomly selected team won at least 50% of its regular season games?
- What is the probability that a randomly selected team won more than 50% of its regular season games?
- What is the probability that a randomly selected team won between 40% and 50% of its regular season games?
- What is the probability that a randomly selected team won no more than 45% of its regular season games if the team won between 40% and 50% of its regular season games?

Mammal	Average Speed, in miles per hour	Wild	Predator
Pig	11	no	no
Squirrel	12	yes	no
Hippopotamus	20	yes	no
Elephant	25	yes	no
Grizzly bear	30	yes	yes
Cat	30	no	yes
Deer	30	yes	no
Giraffe	32	yes	no
Rabbit	35	no	no
Dog	39	no	yes
Donkey	40	no	no
Kangaroo	40	yes	no
Zebra	40	yes	no
Fox	42	yes	yes
Elk	45	yes	no
Horse	48	no	no
Lion	50	yes	yes
Cheetah	70	yes	yes

For your internship with the Zoological Society of San Diego, you analyze data for the eighteen (18) mammals being studied by the Society. For your analysis, you obtain information on gestation period, in days, the life span, in years, determining both the average life span and the maximum life span, and the average speed, in miles per hour, for these mammals as well as whether or not the mammals are considered to be wild or predators.

- What is the probability that a randomly selected mammal is a predator?
- What is the probability that a randomly selected mammal is wild given the mammal is not a predator?
- What is the probability that a randomly selected mammal has an average speed between 30 miles per hour and forty miles per hour?
- What is the probability that a randomly selected mammal is a predator given its average speed is between 40 miles per hour and fifty miles per hour, inclusive?