



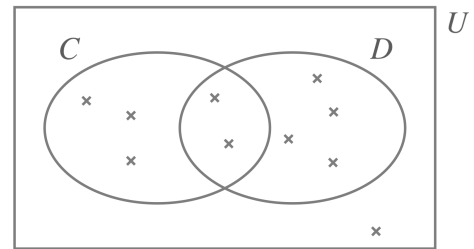
Probability of A and B (Independent Events)

Worksheet 1

Answers to the questions can be found under "Answer Key", under Exercise 1 on the page you'll find by scanning the QR Code or by clicking on the RadfordMathematics.com link in the header.

Question 1

For a survey, a group of people, with pets at home, was asked whether they had a cat or a dog. The result is summarized in the Venn diagram shown here.



1. How many people participated in the survey?
2. How many participants own a cat?
3. How many people own both a cat and a dog?
4. What is the probability that one of the people, participating in the survey, owns both a cat and a dog?

Question 2

The probability that Helen do well at her Mathematics test is $p(M) = 0.8$. The probability that she do well at her French test is $p(F) = 0.7$.

1. What is the probability that Helen does well at both her Mathematics test and her French test?
2. What is the probability that Helen doesn't do well at her Mathematics test and does well at her French test?

Question 3

Like every Sunday afternoon, Cathy and Jonathan play a game of darts. On any given turn, the probability that Cathy hits the center of the target is 0.5 and the probability that they both hit the center of the target is 0.2. What is the probability that Jonathan hit the center of the target?

Question 4

A fair coin is tossed and an unbiased die is rolled.

Find the probability of:

1. Rolling an even number.
2. Flipping tails.
3. Rolling an even number and flipping tails.