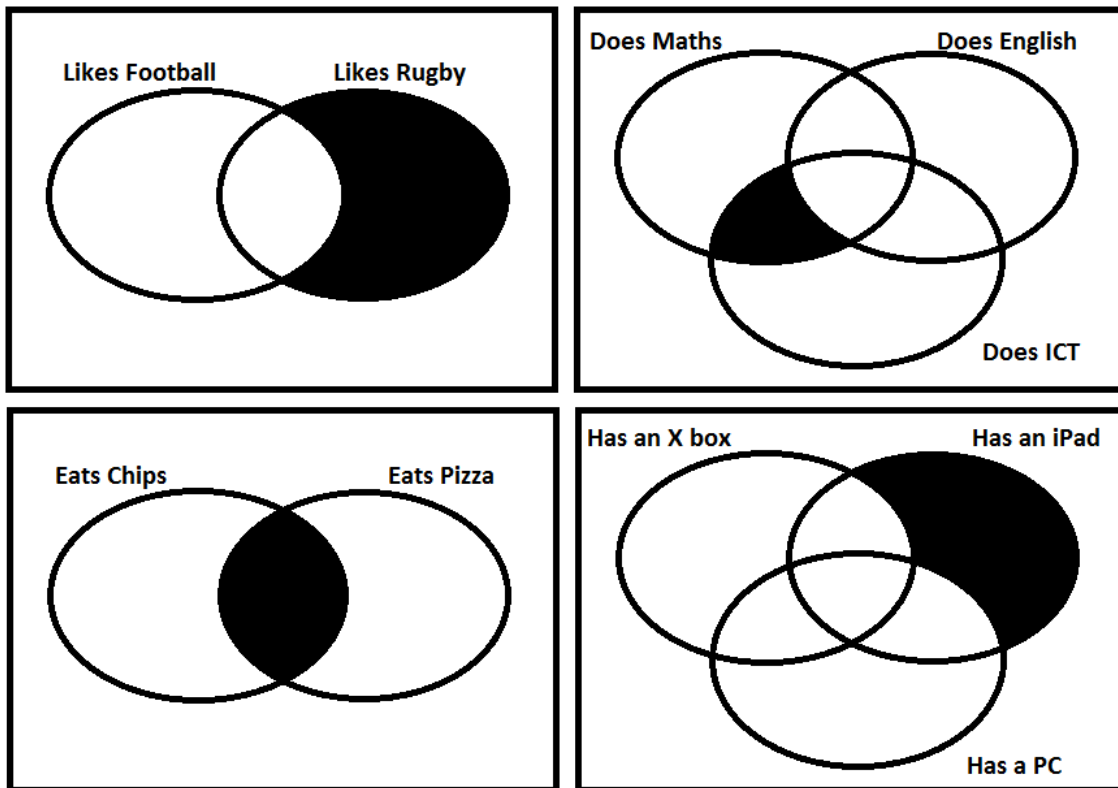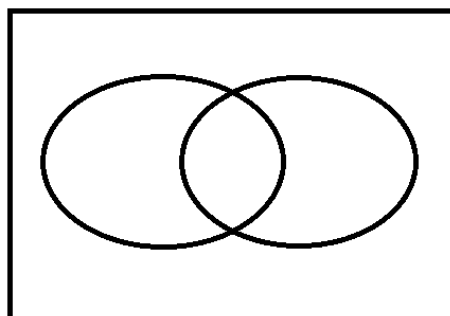**Starter**

Your challenge is to write down as many facts about Bobs life as you can from the information in the Venn Diagrams below.

Activities

(1) At a school 48 students were asked if they liked to play **H**ockey and **T**ennis. 12 said they liked both, 16 said they liked hockey and 14 said they liked tennis. How many liked neither? (the diagram may help below)

(2) At another school 54 students were asked if they like Swimming and Cricket. 8 said they didn't like either. 42 said they liked swimming and 16 said they liked cricket. How many liked both? (space left below to draw something!!)

(3) 100 students are asked if they like Chinese, Indian or Thai food.

4 said they liked all 3.

10 liked Thai and Chinese,
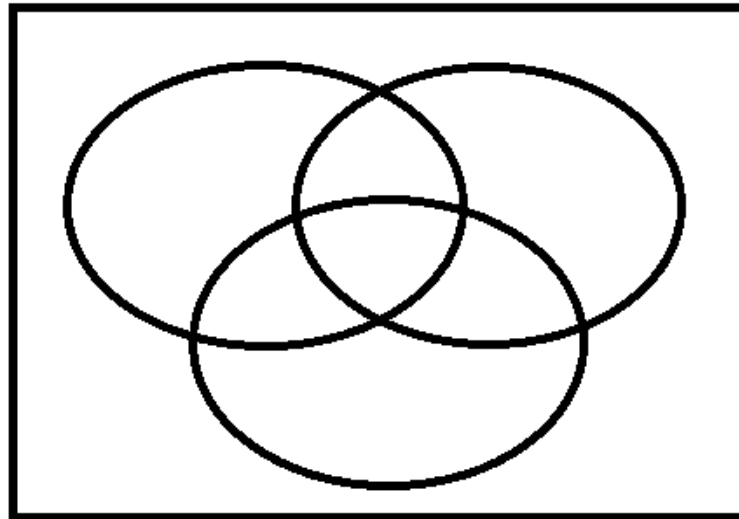
16 Liked Indian and Chinese,

11 Liked Thai and Indian.
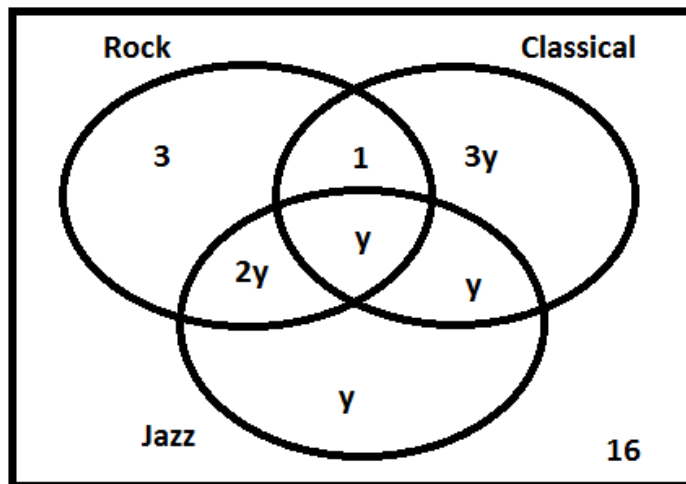
43 liked Chinese,

32 Liked Thai,

42 Liked Indian.

Find out how many students didn't like any of the choices. The diagram below may help.

(4) 100 people were surveyed on which types of music they liked. Information about the survey is given below.

Find:

(a) The value of y

(b) The probability that if someone is chosen at random they like Rock and Jazz but not classical

(c) The probability that if someone is chosen at random they only like two types of music

(d) The probability that if 2 people are chosen they both like classical and jazz only

(e) The probability that if 5 people were chosen at random they didn't like any of the options