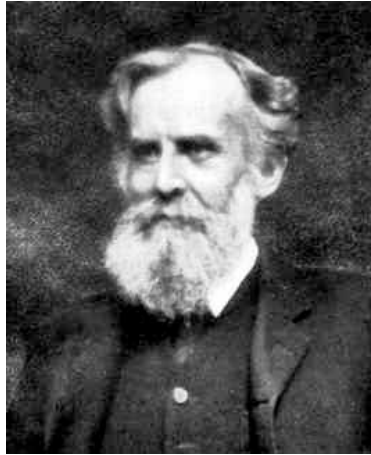


Mathematician of the week

John Venn

Born: Hull, England 1834

Died: Cambridge 1923



John Venn was a British mathematician, philosopher and clergyman. His father was also a reverend in Hull. John was very strictly brought up, and there was never any thought other than that he would follow the family tradition into the priesthood. He was the eighth generation to attend Cambridge. After graduating he ordained as a priest but was frequently torn by his interest in philosophy as he felt his questioning might test the Anglican beliefs he was supposed to represent. Finally he resigned and went back to teach at Gonville and Caius college in Cambridge. His son went on to become the president of Queen's college, Cambridge.

Venn's most important work was in logic and probability. In his book Symbolic logic he introduced his now famous Venn Diagram. This showed how a number of closed curves (circles) could be used to represent sets with something in common.

Venn had other skills and interests too, including a rare skill in building machines. He used his skill to build a machine for bowling cricket balls which was so good that when the Australian Cricket team visited Cambridge in 1909, Venn's machine clean bowled one of its top stars four times.

After his death his son wrote the following description of him.

"Of spare build, he was throughout his life a fine walker and mountain climber, a keen botanist, and an excellent talker and linguist".

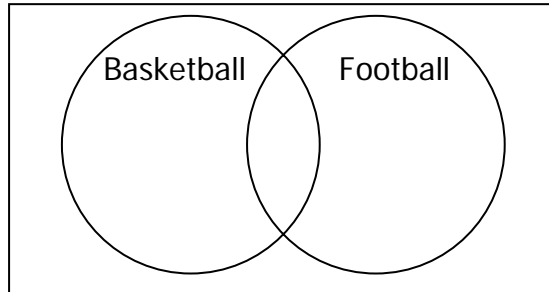
As a memorial to Venn a stained glass window has been mounted in the hall of Gonville and Caius College.



John Venn's Quiz

Solve the following problems using Venn Diagrams

1.



Student athletes were surveyed to see whether they played basketball or football, or both. Of 100 students

56 played basketball

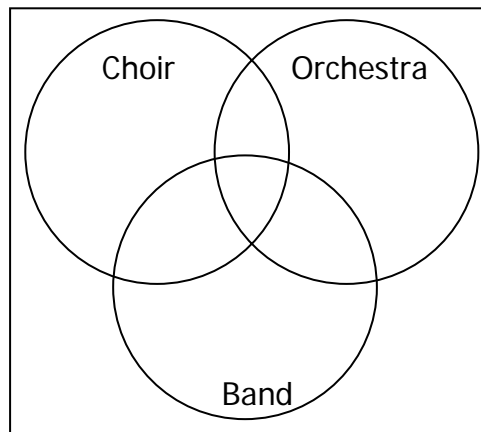
24 played both

68 played football.

How many played basketball only?

How many played football only?

2.



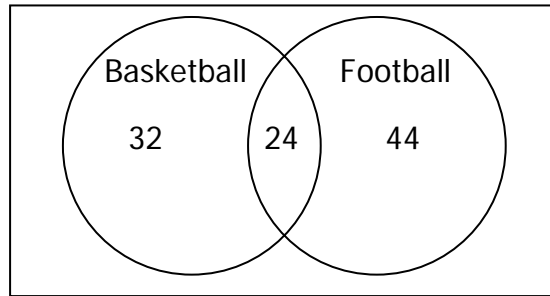
A school is taking three music groups to a festival. 30 students sing in the choir. 40 students play in the orchestra. 50 students march in the band. 15 students belong to the choir and orchestra. 10 students belong to the orchestra and the band. 14 students belong to the choir and the band. 5 students belong to all 3 groups.

How many students will need seats on the bus.

3. Three popular subjects at Trinity are Maths, Science and Art. A review of 200 sixth form students showed that 70 take maths. 80 take science and 60 take art. 35 take maths and science. 33 take maths and art. 31 take science and art. 15 take all three. How many of the 200 students do not take any of these courses.

John Venn's Quiz answers.

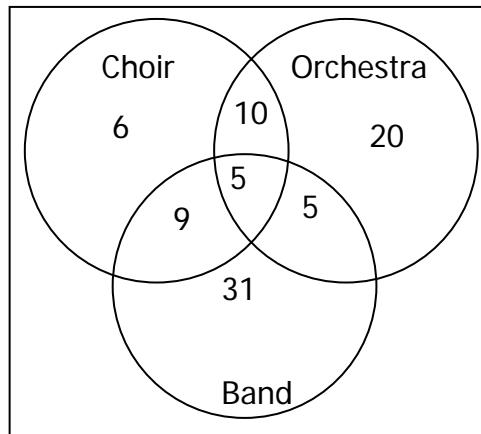
1.



32 basketball only

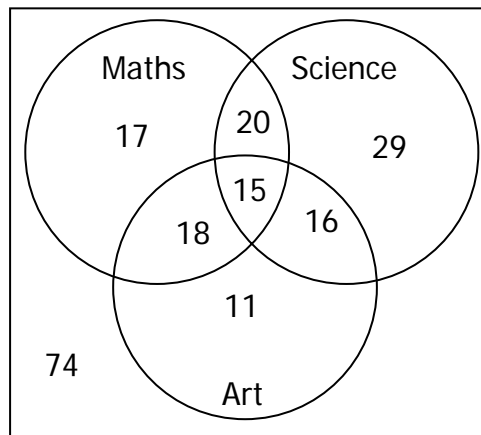
44 football only

2.



86 seats on the bus

3.



74 pupils do not take maths, science or art.