LO- Use and interpret Venn Diagrams

60 people go to a sports club. 18 play hockey, 53 play snooker and 6 don’t play either. Show this on a Venn diagram and find the probability of (i) someone playing hockey only (ii) someone playing both hockey and snooker

At a party 12 people only eat cake, 18 people only drink coke and 30 people eat cake and drink coke. Given 3 people don’t eat cake or drink coke, find the probability somebody chosen at random eats cake at the party.

Draw a Venn diagram to show (i) the multiples of 3 and (ii) the multiples of 4 using the numbers 1-25.

From your diagram find the probability of picking a multiple of 3 only from the list.

There are 120 people in a school. 9/10 of them play in the band. All members of the band play woodwind and/or brass instruments. Of those in the band 67 play brass and 63 play woodwind. Find the number who play both instruments.

The Venn diagram shows Albinos and people with blond hair.

(i) How many Albinos were there?
(ii) What is the probability of picking someone with blond hair only?
(iii) What does the ‘8’ represent?

There are 100 people at a meeting. 32 are male, 37 are old and 12 are old and male. How many young women were at the meeting?

In a survey 18 people said they liked fish and chips. 28 liked chips and 32 liked fish. 30 liked neither. How many people were there altogether?

100 people were asked about the brand of washing powder the bought. How many people bought brand X?

50 people are in a class. 15 have black hair and are right handed. There are the same number of right handed people as people who have black hair. 9 don’t have either black hair nor are right handed. How many people have black hair?

Draw a Venn diagram. Have an ellipse for prime numbers, multiples of 5 and multiples of 4. Fill the diagram with the numbers 1-60.

Shade the following using Venn diagrams

\[ A \cap B \]
\[ A \setminus B \]
\[ (A \cap B)^c \]
\[ A' \cap B \]
\[ A \cap B' \]
\[ (A \cap B)^c \]

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