

Mathematics

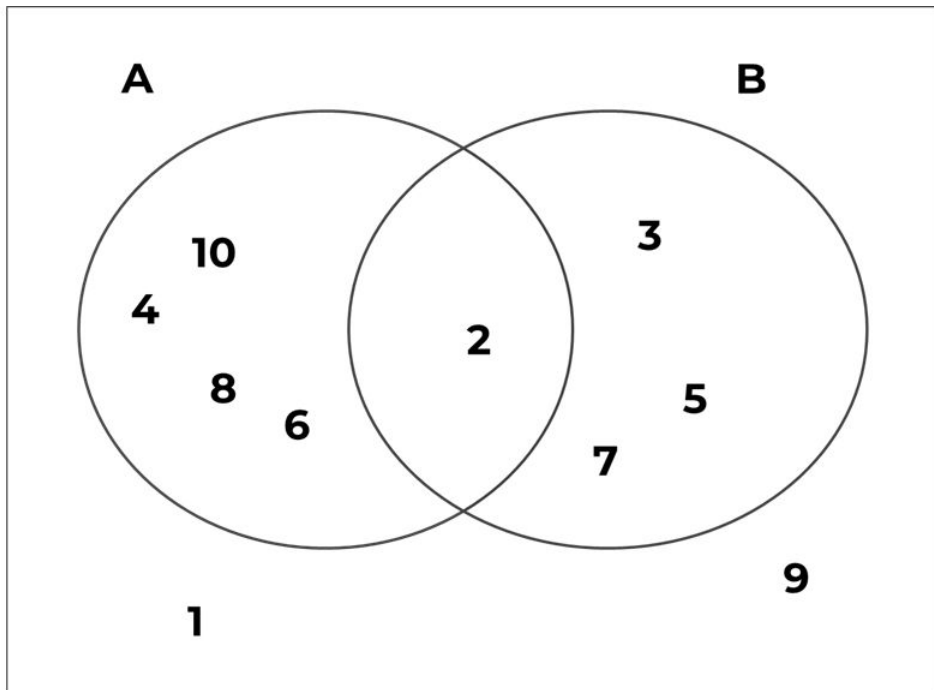
Venn diagrams and probability

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Questions

1)



A number is chosen at random from those shown on the Venn diagram

Find:

a) $P(B)$

b) $P(B')$

c) $P(A \cap B)$



Questions

2) Draw a Venn diagram to show:

$$\mathcal{U} = \{\text{integers from 10 to 20}\}$$

$$E = \{\text{even numbers}\}$$

$$M = \{\text{multiples of 5}\}$$

b) A number is chosen at random from those in the Venn diagram. Find:

i) $P(M)$

ii) $P(E \cap M)$

iii) $P(E \cup M)$

iv) $P(E' \cap M)$

v) $P(E \cap M)'$



Questions

- 3) Some students were asked if they played badminton or squash.

The Venn diagram shows information about their answers.

A student is chosen at random. Work out:

- a) $P(B)$
- b) $P(S)$
- c) $P(B \cap S')$

