

- 10** $\mathcal{E} = \{n: n \text{ is an integer and } 1 \leq n \leq 8\}$
 $A = \{\text{factors of } 12\}$
 $B = \{\text{odd numbers}\}$

Find

(a) $A \cap B$

$A \cap B = \{\dots\dots\dots\}$ [1]

(b) $n(A' \cup B)$.

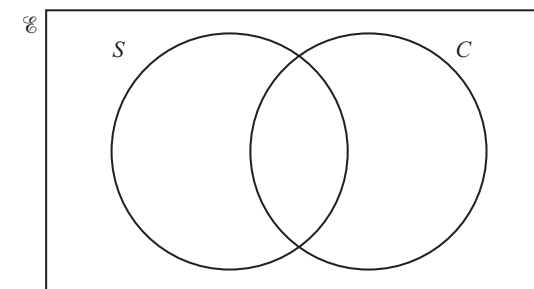
$\dots\dots\dots$ [1]

- 12** A fitness club has 100 members.

60 swim (S).

70 cycle (C).

25 do not swim or cycle.



- (a)** Complete the Venn diagram.

[3]

- (b)** One member of the fitness club is chosen at random.

For this member, find

(i) $P(C)$

$\dots\dots\dots$ [1]

(ii) $P(S \cap C)$

$\dots\dots\dots$ [1]

(iii) $P(S \cup C')$.

$\dots\dots\dots$ [1]