

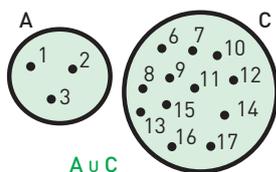
YOU & MATHS Sketch Venn diagrams Consider the following sets:

$$A = \{x \in \mathbb{N} \mid 0 < x \leq 3\}, B = \{x \in \mathbb{N} \mid x > 10 \text{ or } x \leq 4\}, \text{ and } C = \{x \in \mathbb{N} \mid 5 < x \leq 17\},$$

and represent:

- a. $A \cup C$;
- b. $B \cap C$.

- a. By representing the sets A and C , we notice that they do not have any element in common. So, $A \cup C$ is simply the set of all the elements of A plus all the elements of C .



- b. We draw set B , which is infinite, and set C . They have some elements in common, so their intersection $B \cap C$ will be:

