

Determining outcomes for unions, intersections, and complements of...

Determining outcomes for unions, intersections, and complements of events

A marble is selected from a bag containing eight marbles numbered 1 to 8. The number on the marble selected will be recorded as the outcome.

Consider the following events.

Event A : The marble selected has an odd number.

Event B : The marble selected has a number greater than 3.

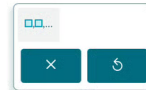
Give the outcomes for each of the following events. If there is more than one element in the set, separate them with commas.

- (a) Event " A or B ":
- (b) Event " A and B ":
- (c) The complement of the event A :

$$A = \{1, 3, 5, 7\}$$

$$B = \{4, 5, 6, 7, 8\}$$

Union $\cup$ "or" bring together
 Intersection $\cap$ "and" share
 $A' = A$ not what's not in A



$$A \cup B = \{1, 3, 4, 5, 6, 7, 8\}$$

$$A \cap B = \{5, 7\}$$

$$A' = \{2, 4, 6, 8\}$$

A not