

## Section 4.5 — Summary

Name	Math symbol	Meaning	Simple events	Picture
union	$A \cup B$	either $A$ <u>or</u> $B$ or both occurs	all outcomes in $A$ <u>or</u> $B$ or both	
intersection	$A \cap B$	both $A$ <u>and</u> $B$ occurs	all outcomes in $A$ <u>and</u> $B$	
complement	$A^c$	$A$ did not occur	all outcomes not in $A$	

and these have probabilities....

$$P(A^c) = \quad \quad \quad \text{(complement rule)}$$

$$P(A \cup B) = \quad \quad \quad \text{(union rule)}$$