Venn Diagrams

not $A$ written $A^{\prime}$ or $A^{c}$ or the complement of $A$

$A \cup B \quad A$ union $B$ everything in $A, B$ or both

$A \cap B$
$A$ intersect $B$ everything in both

Venn diagrams can show actual numbers, totals and probabilities

Examples Let $A$ be even numbers on die Let $B$ be numbers $>3$


Actual Numbers


Probabilities summing to 1


Totals of numbers
in each section of diagram

