

# Fill in the Blanks

# Venn Diagrams and Set Notation

In all questions  $\xi = \{\text{Integers from 1 to 12 inclusive}\}$

Sets	Venn Diagram	$A \cup B$	$A \cap B$	$A' \cap B$	$(A \cup B)'$
$A =$ $\{\text{multiples of 3}\}$ $B =$ $\{\text{factors of 12}\}$		$\{1, 2, 3, 4, 6, 9, 12\}$	$\{3, 6, 12\}$	$\{1, 2, 4\}$	$\{5, 7, 8, 10, 11\}$
$A =$ $\{\text{prime numbers}\}$ $B =$ $\{\text{odd numbers}\}$		$\{1, 2, 3, 5, 7, 9, 11\}$	$\{3, 5, 7, 11\}$	$\{1, 9\}$	$\{4, 6, 8, 10, 12\}$
$A =$ $\{\text{integers less than 7}\}$ $B =$ $\{\text{square numbers}\}$		$\{1, 2, 3, 4, 5, 6, 9\}$	$\{1, 4\}$	$\{9\}$	$\{7, 8, 10, 11, 12\}$
$A =$ $\{\text{square numbers}\}$ $B =$ $\{\text{prime numbers}\}$		$\{1, 2, 3, 4, 5, 7, 9, 11\}$	$\{\}$	$\{2, 3, 5, 7, 11\}$	$\{6, 8, 10, 12\}$
$A =$ $\{\text{factors of 8}\}$ $B =$ $\{\text{cube numbers}\}$		$\{1, 2, 4, 8\}$	$\{1, 8\}$	$\{\}$	$\{3, 5, 6, 7, 9, 10, 11, 12\}$
$A =$ $\{\text{factors of 36}\}$ $B =$ $\{\text{integers } > 4\}$		$\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$	$\{6, 9, 12\}$	$\{5, 7, 8, 10, 11\}$	$\{\}$