

# Fill in the Blanks

# Simplifying Surds

Question	Surd as a Product of its Prime Factors	Simplify 'Paired' Surds	Answer
$\sqrt{12}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{3}$	$2 \times \sqrt{3}$	$2\sqrt{3}$
$\sqrt{40}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{5}$	$2 \times \sqrt{2} \times \sqrt{5}$	
$\sqrt{18}$	$\sqrt{2} \times \sqrt{3} \times \sqrt{3}$		
$\sqrt{75}$			
$\sqrt{20}$			
	$\sqrt{3} \times \sqrt{3} \times \sqrt{2} \times \sqrt{5}$		$3\sqrt{10}$
			$3\sqrt{7}$
$\sqrt{48}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{3}$	$2 \times 2 \times \sqrt{3}$	$4\sqrt{3}$
$\sqrt{72}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{3} \times \sqrt{3}$		
$\sqrt{200}$			
$\sqrt{162}$			
$\sqrt{675}$			
		$5 \times \sqrt{2} \times \sqrt{3}$	$5\sqrt{6}$
			$10\sqrt{3}$
			$8\sqrt{7}$