



Fill In The Blanks...



Simplifying Surds

Question	Surd as a Product of its Prime Factors	Simplify 'Repeated' Surds	Answer
$\sqrt{12}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{3}$	$2 \times \sqrt{3}$	$2\sqrt{3}$
$\sqrt{45}$	$\sqrt{3} \times \sqrt{3} \times \sqrt{5}$	$3 \times \sqrt{5}$	$3\sqrt{5}$
$\sqrt{18}$	$\sqrt{2} \times \sqrt{3} \times \sqrt{3}$	$3 \times \sqrt{2}$	$3\sqrt{2}$
$\sqrt{75}$	$\sqrt{3} \times \sqrt{5} \times \sqrt{5}$	$5 \times \sqrt{3}$	$5\sqrt{3}$
$\sqrt{20}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{5}$	$2 \times \sqrt{5}$	$2\sqrt{5}$
$\sqrt{98}$	$\sqrt{7} \times \sqrt{7} \times \sqrt{2}$	$7 \times \sqrt{2}$	$7\sqrt{2}$
$\sqrt{63}$	$\sqrt{3} \times \sqrt{3} \times \sqrt{7}$	$3 \times \sqrt{7}$	$3\sqrt{7}$
$\sqrt{48}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{3}$	$2 \times 2 \times \sqrt{3}$	$4\sqrt{3}$
$\sqrt{72}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{3} \times \sqrt{3}$	$2 \times 3 \times \sqrt{2}$	$6\sqrt{2}$
$\sqrt{200}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{5} \times \sqrt{5}$	$2 \times 5 \times \sqrt{2}$	$10\sqrt{2}$
$\sqrt{162}$	$\sqrt{2} \times \sqrt{3} \times \sqrt{3} \times \sqrt{3} \times \sqrt{3}$	$3 \times 3 \times \sqrt{2}$	$9\sqrt{2}$
$\sqrt{675}$	$\sqrt{3} \times \sqrt{3} \times \sqrt{3} \times \sqrt{5} \times \sqrt{5}$	$3 \times 5 \times \sqrt{3}$	$15\sqrt{3}$
$\sqrt{180}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{3} \times \sqrt{3} \times \sqrt{5}$	$2 \times 3 \times \sqrt{5}$	$6\sqrt{5}$
$\sqrt{300}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{3} \times \sqrt{5} \times \sqrt{5}$	$2 \times 5 \times \sqrt{3}$	$10\sqrt{3}$
$\sqrt{448}$	$\sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{2} \times \sqrt{7}$	$2 \times 2 \times 2 \times \sqrt{7}$	$8\sqrt{7}$