

## UNDERSTANDING SIMPLE SURDS – WORKSHEET

### COURSE/LEVEL

NSW Secondary High School Year 10 Advanced Mathematics. Syllabus reference: N4

**Complete** by writing the simplest exact expression in each space:

$\sqrt{11} \times \sqrt{2} = \dots\dots$	$(\sqrt{11})^2 = \dots\dots$	$\sqrt{10} = \sqrt{\dots} \times \sqrt{\dots}$	$\sqrt{9} = \dots\dots$
$\sqrt{5} \times \sqrt{7} = \dots\dots$	$(\sqrt{5})^2 = \dots\dots$	$\sqrt{10} \times \sqrt{10} = \dots\dots$	$\sqrt{15} = \sqrt{3} \times \dots\dots$
$(\sqrt{7})^2 = \dots\dots$	$\sqrt{6} = \sqrt{2} \times \dots\dots$	$\sqrt{14} = \sqrt{7} \times \dots\dots$	$(\sqrt{61})^2 = \dots\dots$
$\sqrt{14} \times \sqrt{14} = \dots\dots$	$(\sqrt{2})^2 = \dots\dots$	$\sqrt{7} \times \sqrt{7} \times \sqrt{7} = \dots \times \sqrt{7}$	$(\sqrt{5})^3 = \dots\dots \times \sqrt{5}$
$\sqrt{5} \times \sqrt{\dots} = \sqrt{15}$	$\sqrt{35} = \dots\dots \times \dots\dots$	$\sqrt{18} = \dots\dots \times \sqrt{2}$	$\sqrt{12} = \dots\dots \times \sqrt{3}$
$\sqrt{45} = \dots\dots \times \sqrt{5}$	$\sqrt{27} = \dots \times \dots \times \dots$	$\sqrt{28} = \sqrt{7} \times \dots\dots$	$\sqrt{24} = \sqrt{6} \times \dots\dots$
$\sqrt{20} = \sqrt{5} \times \dots\dots$	$(\sqrt{21})^2 = \dots\dots$	$\sqrt{66} = \dots\dots \times \sqrt{6}$	$\sqrt{36} = 2 \times \dots\dots$
$\sqrt{7^2} = \dots\dots$	$\sqrt{40} = \sqrt{10} \times \dots\dots$	$\sqrt{75} = \sqrt{3} \times \dots\dots$	$\sqrt{44} = \dots\dots \times 2$
$\sqrt{32} = 4 \times \dots\dots$	$\sqrt{63} = \dots\dots \times \sqrt{7}$	$\sqrt{80} = \dots\dots \times \sqrt{5}$	$\sqrt{3^2} = \dots\dots$
$\sqrt{65} = \dots\dots \times \dots\dots$	$\sqrt{66} = \dots \times \dots \times \dots$	$\sqrt{120} = \sqrt{30} \times \dots\dots$	$\sqrt{23^2} = \dots\dots$
$\sqrt{52} = \dots\dots \times \dots\dots$	$\sqrt{63} = 3 \times \dots\dots$	$\sqrt{99} = \dots\dots \times \dots\dots$	$\sqrt{96} = \dots\dots \times \sqrt{6}$
$\sqrt{48} = 4 \times \dots\dots$	$56 = \sqrt{14} \times \dots\dots$	$\dots\dots = (\sqrt{49})^2$	$(\sqrt{11})^2 = \dots\dots$
$(\sqrt{51})^2 = \dots\dots$	$\sqrt{108} = \dots\dots \times \sqrt{3}$	$\sqrt{13^2} = \dots\dots$	$\sqrt{28} = 2 \times \dots\dots$
$(\sqrt{22})^2 = \dots\dots$	$\sqrt{31^2} = \dots\dots$	$\sqrt{32} = \sqrt{2} \times \dots\dots$	$\sqrt{48} = \sqrt{3} \times \dots\dots$
$\sqrt{63} = \dots\dots \times \sqrt{7}$	$\sqrt{19^2} = \dots\dots$	$\sqrt{30} = \sqrt{10} \times \dots\dots$	$\sqrt{44} = 2 \times \dots\dots$
$\sqrt{27} = 3 \times \dots\dots$	$\sqrt{80} = \dots\dots \times 4$	$\sqrt{70} = \dots \times \dots \times \dots$	$\sqrt{30} = \dots \times \dots \times \dots$