Eugene work

UNDERSTANDING SIMPLE SURDS – WORKSHEET

61/64

V. Good!

COURSE/LEVEL

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

Complete by writing the simplest exact expression in each space:

$\sqrt{11}\times\sqrt{2}=\sqrt{22}$ ✓ $(\sqrt{11})^2=11$ ✓ $\sqrt{10}=\sqrt{5}\times\sqrt{2}$ ✓ $\sqrt{9}=3$ ✓

$\sqrt{5}\times\sqrt{7}=\sqrt{35}$ ✓ $(\sqrt{5})^2=5$ ✓ $\sqrt{10}\times\sqrt{10}=10$ ✓ $\sqrt{15}=\sqrt{3}\times\sqrt{5}$ ✓

$(\sqrt{7})^2=7$ ✓ $\sqrt{6}=\sqrt{2}\times\sqrt{3}$ ✓ $\sqrt{14}=\sqrt{7}\times\sqrt{2}$ ✓ $(\sqrt{61})^2=61$ ✓

$\sqrt{14}\times\sqrt{14}=14$ ✓ $(\sqrt{2})^2=2$ ✓ $\sqrt{7}\times\sqrt{7}\times\sqrt{7}=7\times\sqrt{7}$ ✓ $(\sqrt{5})^3=5\times\sqrt{5}$ ✓

$\sqrt{5}\times\sqrt{3}=\sqrt{15}$ ✓ $\sqrt{35}=\sqrt{7}\times\sqrt{5}$ ✓ $\sqrt{18}=3\times\sqrt{2}$ ✓ $\sqrt{12}=2\times\sqrt{3}$ ✓

$\sqrt{45}=3\times\sqrt{5}$ ✓ $\sqrt{27}=\sqrt{3}\times\sqrt{3}\times\sqrt{3}$ ✓ $\sqrt{28}=\sqrt{7}\times 2$ ✓ $\sqrt{24}=\sqrt{6}\times 2$ ✓

$\sqrt{20}=\sqrt{5}\times\sqrt{4}$ ✓ $(\sqrt{21})^2=21$ ✓ $\sqrt{66}=\sqrt{11}\times\sqrt{6}$ ✓ $\sqrt{36}=2\times 3$ ✓

$\sqrt{7^2}=7$ ✓ $\sqrt{40}=\sqrt{10}\times 2$ ✓ $\sqrt{75}=\sqrt{3}\times 5$ ✓ $\sqrt{44}=\sqrt{11}\times 2$ ✓

$\sqrt{32}=4\times\sqrt{2}$ ✓ $\sqrt{63}=\sqrt{9}\times\sqrt{7}$ ✓ $\sqrt{80}=\sqrt{16}\times\sqrt{5}$ ✓ $\sqrt{3^2}=3$ ✓

$\sqrt{65}=\sqrt{5}\times\sqrt{13}$ ✓ $\sqrt{66}=\sqrt{2}\times\sqrt{3}\times\sqrt{11}$ ✓ $\sqrt{120}=\sqrt{30}\times 2$ ✓ $\sqrt{23^2}=23$ ✓

$\sqrt{52}=\sqrt{26}\times\sqrt{2}$ ✗ (2×13, $\sqrt{13}\times 2$) $\sqrt{63}=3\times\sqrt{7}$ ✓ $\sqrt{99}=3\times\sqrt{11}$ ✓ $\sqrt{96}=4\times\sqrt{6}$ ✓

$\sqrt{48}=4\times\sqrt{3}$ $\sqrt{56}=\sqrt{14}\times\ldots$ ✓ ($\sqrt{56}=\sqrt{14}\times 2$) $49=(\sqrt{49})^2$ ✓ $(\sqrt{11})^2=11$ ✓

$(\sqrt{51})^2=51$ ✓ $\sqrt{108}=6\times\sqrt{3}$? $\sqrt{13^2}=13$ ✓ $\sqrt{28}=2\times\sqrt{7}$ ✓

$(\sqrt{22})^2=22$ ✓ $\sqrt{31^2}=31$ ✓ $\sqrt{32}=\sqrt{2}\times 4$ ✓ $\sqrt{48}=\sqrt{3}\times 4$ ✓

$\sqrt{63}=3\times\sqrt{7}$ ✓ $\sqrt{19^2}=19$ ✓ $\sqrt{30}=\sqrt{10}\times\sqrt{3}$ ✓ $\sqrt{44}=2\times\sqrt{11}$ ✓

$\sqrt{27}=3\times\sqrt{3}$ ✓ $\sqrt{80}=\sqrt{5}\times 4$ ✓ $\sqrt{70}=\sqrt{2}\times\sqrt{5}\times\sqrt{7}$ ✓ $\sqrt{30}=\sqrt{2}\times\sqrt{3}\times\sqrt{5}$ ✓