

Algebra / Simplifying the square root of a whole number greater than 100

$\sqrt{124}$ $\begin{array}{c} \swarrow \searrow \\ 2 \quad 62 \\ \swarrow \searrow \\ 2 \quad 31 \end{array}$ $2\sqrt{31}$	$\sqrt{250}$ $\begin{array}{c} \swarrow \searrow \\ 25 \quad 10 \\ \swarrow \searrow \\ 55 \quad 52 \end{array}$ $2.5\sqrt{5.5}$ $5\sqrt{10}$
$\sqrt{72}$ $\begin{array}{c} \swarrow \searrow \\ 8 \quad 9 \\ \swarrow \searrow \\ 24 \quad 33 \\ \swarrow \searrow \\ 22 \end{array}$ $6\sqrt{2}$	
$\sqrt{75}$ $\begin{array}{c} \swarrow \searrow \\ 5 \quad 15 \\ \swarrow \searrow \\ 5 \quad 3 \end{array}$ $5\sqrt{3}$	
$\sqrt{147}$ $\begin{array}{c} \swarrow \searrow \\ 7 \quad 21 \\ \swarrow \searrow \\ 7 \quad 3 \end{array}$ $7\sqrt{3}$	$\sqrt{200}$ $\begin{array}{c} \swarrow \searrow \\ 8 \quad 25 \\ \swarrow \searrow \\ 4 \quad 5 \end{array}$ $2.5\sqrt{2}$ $10\sqrt{2}$ $\begin{array}{c} \boxed{4} \quad \boxed{55} \\ \boxed{22} \end{array}$
$\sqrt{162}$ $\begin{array}{c} \swarrow \searrow \\ 2 \quad 81 \\ \swarrow \searrow \\ 99 \end{array}$ $9\sqrt{2}$	$\sqrt{80}$ $\begin{array}{c} \swarrow \searrow \\ 8 \quad 10 \\ \swarrow \searrow \\ 42 \quad 25 \\ \swarrow \searrow \\ 22 \end{array}$ $2.2\sqrt{2.25} = 80$ $2.2\sqrt{5} = \boxed{4\sqrt{5}}$

#Radicals