

## Simplifier des racines carrées

Simplifier en justifiant :

$$\sqrt{28} = \dots \sqrt{2 \times 2 \times 7} = 2\sqrt{7}$$

$$\begin{array}{r|l} 28 & 2 \\ 14 & 2 \\ 7 & 7 \\ 1 & \end{array}$$

$$\sqrt{75} = \dots \sqrt{3 \times 5 \times 5} = 5\sqrt{3}$$

$$\begin{array}{r|l} 75 & 3 \\ 25 & 5 \\ 5 & 5 \\ 1 & \end{array}$$

$$\sqrt{200} = \dots \sqrt{2 \times 2 \times 2 \times 5 \times 5} = 2 \times 5\sqrt{2} = 10\sqrt{2}$$

$$\begin{array}{r|l} 200 & 2 \\ 100 & 2 \\ 50 & 2 \\ 25 & 5 \\ 5 & 5 \\ 1 & \end{array}$$

$$\sqrt{500} = \sqrt{2 \times 2 \times 5 \times 5 \times 5} = 2 \times 5 \sqrt{5} = 10\sqrt{5}$$

$$\begin{array}{r}
 500 | 2 \\
 280 | 2 \\
 125 | 5 \\
 25 | 5 \\
 5 | 5 \\
 \hline
 1
 \end{array}$$

$$\sqrt{72} = \sqrt{2 \times 2 \times 2 \times 3 \times 3} = 2 \times 3 \sqrt{2} = 6\sqrt{2}$$

$$\begin{array}{r}
 72 | 2 \\
 36 | 2 \\
 18 | 2 \\
 9 | 3 \\
 3 | 3 \\
 \hline
 1
 \end{array}$$

$$\sqrt{108} = \sqrt{2 \times 2 \times 3 \times 3 \times 3} = 2 \times 3 \sqrt{3} = 6\sqrt{3}$$

$$\begin{array}{r}
 108 | 2 \\
 54 | 2 \\
 27 | 3 \\
 9 | 3 \\
 3 | 3 \\
 \hline
 1
 \end{array}$$