

# 1.19.16

Divide the following radicals and rationalize the denominator.

$$\frac{6\sqrt{12}}{2\sqrt{24}}$$

$$\frac{3}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$$

$$\frac{3\sqrt{2}}{\cancel{\sqrt{4}}_2}$$

$$= \boxed{\frac{3\sqrt{2}}{2}}$$

$$\begin{matrix} 7 \cancel{\div} & 7\sqrt{21} \div 3 \\ 7 \cancel{\div} & 14\sqrt{18} \div 3 \end{matrix}$$

$$\frac{1\sqrt{7}}{2\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}}$$

$$\frac{\sqrt{42}}{2\sqrt{\cancel{6}}_6}$$

$$\boxed{\frac{\sqrt{42}}{12}}$$