

1.4.16

Simplify and divide the following radicals.

$$\begin{aligned}
 1) \quad \frac{\sqrt{15}}{5\sqrt{20}} &= \frac{\sqrt{15}}{10\sqrt{5}} = \boxed{\frac{\sqrt{3}}{10}} \\
 &\quad \begin{array}{l} 5 \cancel{\sqrt{4}} \cdot \sqrt{5} \\ 5 \cdot 2 \sqrt{5} \\ 10\sqrt{5} \end{array} \quad \swarrow
 \end{aligned}$$

$$\begin{aligned}
 2) \quad \frac{\sqrt{8}}{\sqrt{100}} &= \frac{2\sqrt{2}}{10} = \boxed{\frac{\sqrt{2}}{5}} \\
 &\quad \begin{array}{l} \sqrt{8} \\ \cancel{\sqrt{4}} \sqrt{2} \\ 2\sqrt{2} \end{array} \quad \searrow
 \end{aligned}$$

$$\frac{2}{10} = \frac{1}{5}$$