

Divide Radical Expressions

Simplify the radical expressions.

$$\frac{1 - \sqrt{11}}{1 - \sqrt{3}}$$

$$\frac{2 + 4\sqrt{7}}{6 + 5\sqrt{2}}$$

$$\frac{1 + \sqrt{3}}{1 - \sqrt{5}}$$

$$\frac{1 - \sqrt{7}}{1 - \sqrt{11}}$$

$$\frac{6 + 5\sqrt{11p}}{2\sqrt{5p}}$$

$$\frac{1 + \sqrt{7}}{1 - \sqrt{2}}$$

Divide Radical Expressions

Simplify the radical expressions.

$$\begin{aligned}\frac{1 - \sqrt{11}}{1 - \sqrt{3}} \\&= \frac{1 + \sqrt{3} - \sqrt{11} - \sqrt{33}}{-2} \\&= \frac{-1 - \sqrt{3} + \sqrt{11} + \sqrt{33}}{2}\end{aligned}$$

$$\begin{aligned}\frac{1 + \sqrt{3}}{1 - \sqrt{5}} \\&= \frac{1 + \sqrt{5} + \sqrt{3} + \sqrt{15}}{-4} \\&= \frac{-1 - \sqrt{5} - \sqrt{3} - \sqrt{15}}{4}\end{aligned}$$

$$\begin{aligned}\frac{6 + 5\sqrt{11p}}{2\sqrt{5p}} \\&= \frac{6\sqrt{5p} + 5p\sqrt{55}}{10p}\end{aligned}$$

$$\begin{aligned}\frac{2 + 4\sqrt{7}}{6 + 5\sqrt{2}} \\&= \frac{6 - 5\sqrt{2} + 12\sqrt{7} - 10\sqrt{14}}{-7} \\&= \frac{-6 + 5\sqrt{2} - 12\sqrt{7} + 10\sqrt{14}}{7}\end{aligned}$$

$$\begin{aligned}\frac{1 - \sqrt{7}}{1 - \sqrt{11}} \\&= \frac{1 + \sqrt{11} - \sqrt{7} - \sqrt{77}}{-10} \\&= \frac{-1 - \sqrt{11} + \sqrt{7} + \sqrt{77}}{10}\end{aligned}$$

$$\begin{aligned}\frac{1 + \sqrt{7}}{1 - \sqrt{2}} \\&= -1 - \sqrt{2} - \sqrt{7} - \sqrt{14}\end{aligned}$$