

$  \begin{aligned}  & 3\sqrt{20}(2\sqrt{5} - \sqrt{3}) \\  & = 6\sqrt{100} - 3\sqrt{60} \\  & = 60 - 3(2\sqrt{15}) \\  & = 60 - 6\sqrt{15}  \end{aligned}  $	$  \begin{aligned}  & (\sqrt{2x})(5\sqrt{2x}) \\  & = 5(2x) \\  & = 10x  \end{aligned}  $
<p>Change <math>7\sqrt[3]{5}</math> to an entire radical.</p> $  \begin{aligned}  & = \sqrt[3]{5 \cdot 7 \cdot 7} \\  & = \sqrt[3]{175}  \end{aligned}  $	<p>Given the area of a rectangle to be <math>30\sqrt{98}</math> and the length <math>5\sqrt{14}</math>, determine the width.</p> $  \begin{aligned}  \frac{30\sqrt{98}}{5\sqrt{14}} &= \frac{6(7)\sqrt{2}}{1(\sqrt{14})} = \frac{42}{\sqrt{7}} \\  &= \left(\frac{42}{\sqrt{7}}\right)\left(\frac{\sqrt{7}}{\sqrt{7}}\right) = \frac{42\sqrt{7}}{7} = 6\sqrt{7}  \end{aligned}  $
$  \frac{15\sqrt{9x^3}}{\sqrt{3x^2}} = 15\sqrt{3x}  $	<p>Change <math>2x\sqrt{5x}</math> to an entire radical.</p> $  \begin{aligned}  & \sqrt{5x(2x)(2x)} \\  & = \sqrt{20x^3}  \end{aligned}  $
<p>List the restrictions of: <math>\sqrt{2x+6}</math></p> $  \begin{aligned}  2x+6 &\geq 0 \\  2x &\geq -6 \\  x &\geq -3  \end{aligned}  $	$  \begin{aligned}  \frac{\sqrt{8x^5}}{\sqrt{x}} &= \sqrt{8x^4} \\  &= 2x^2\sqrt{2}  \end{aligned}  $
$  \begin{aligned}  & 2\sqrt{x^5}(\sqrt{x} + 3\sqrt{x^3}) \\  & = 2\sqrt{x^6} + 6\sqrt{x^8} \\  & = 2(x^3) + 6(x^4)  \end{aligned}  $	$  \begin{aligned}  \left(\frac{4}{\sqrt{2x}}\right)\left(\frac{\sqrt{2x}}{\sqrt{2x}}\right) &= \frac{4\sqrt{2x}}{2x} \\  &= \frac{2\sqrt{2x}}{x}  \end{aligned}  $