

$3\sqrt{20}(2\sqrt{5} - \sqrt{3})$ $= 6\sqrt{100} - 3\sqrt{60}$ $= 60 - 3(2\sqrt{15})$ $= 60 - 6\sqrt{15}$	$(\sqrt{2x})(5\sqrt{2x})$ $5(2x)$ $= 10x$
<p>Change <math>7\sqrt[3]{5}</math> to an entire radical.</p> $= \sqrt[3]{5 \cdot 7 \cdot 7 \cdot 7}$ $= \sqrt[3]{1715}$	<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> $\frac{30\sqrt{98}}{5\sqrt{14}} = \frac{6(7)\sqrt{2}}{1(\sqrt{14})} = \frac{42}{\sqrt{7}}$ $= \left(\frac{42}{\sqrt{7}}\right) \left(\frac{\sqrt{7}}{\sqrt{7}}\right) = \frac{42\sqrt{7}}{7} = 6\sqrt{7}$
$\frac{15\sqrt{9x^3}}{\sqrt{3x^2}} = 15\sqrt{3x}$	<p>Change <math>2x\sqrt{5x}</math> to an entire radical.</p> $\sqrt{5x(2x)(2x)}$ $= \sqrt{20x^3}$
<p>List the restrictions of: <math>\sqrt{2x+6}</math></p> $2x+6 \geq 0$ $2x \geq -6$ $x \geq -3$	$\frac{\sqrt{8x^5}}{\sqrt{x}} = \sqrt{8x^4}$ $= 2x^2\sqrt{2}$
$2\sqrt{x^5}(\sqrt{x} + 3\sqrt{x^3})$ $2\sqrt{x^6} + 6\sqrt{x^8}$ $= 2(x^3) + 6(x^4)$	$\left(\frac{4}{\sqrt{2x}}\right) \left(\frac{\sqrt{2x}}{\sqrt{2x}}\right) = \frac{4\sqrt{2x}}{2x}$ $= \frac{2\sqrt{2x}}{x}$