Name Key Date______ Period______

Find the Errors

Original Problem	Incorrect Work *(Examine the incorrect work below to find the mistake(s). CIRCLE any mistakes that you find.*	Corrected Work *Use the space below to show the CORRECT way to solve the problem.*
$\sqrt{15}\cdot\sqrt{\frac{3}{5}}$	$\frac{\sqrt{45}\cdot\sqrt{5}}{\sqrt{5}\cdot\sqrt{5}} = \frac{\sqrt{225}}{5}$ $= \sqrt{45}$ $= \sqrt{9\cdot 5} = \boxed{3\sqrt{5}}$ $\begin{array}{r} \overset{2}{4}5 \\ \times\ 5 \\ \hline 225 \end{array}$	$\frac{\sqrt{3\cdot 5\cdot 3}}{\sqrt{5}} = \frac{\cancel{\sqrt{5}}\sqrt{9}}{\cancel{\sqrt{5}}} = \sqrt{9}$ $= \boxed{3}$
$\sqrt[3]{\frac{8y}{3x^4}}$	$\sqrt[3]{\frac{8y}{3x^4}}\cdot\frac{\sqrt[3]{3x^4}}{\sqrt[3]{3x^4}} = \frac{2\sqrt[3]{3x^4y}}{3x^4}$ $= \cancel{\frac{2\sqrt[3]{3x^4}y}{3x^4}}$ $= \boxed{2\sqrt[3]{y}}$	$\frac{\sqrt[3]{8y}\cdot\sqrt[3]{3^2x^2}}{\sqrt[3]{3x^4}\cdot\sqrt[3]{3^2x^2}} = \frac{\sqrt[3]{2^3\cdot 3^2\cdot x^2\cdot y}}{\sqrt[3]{3^3\cdot x^6}}$ $= \boxed{\frac{2\sqrt[3]{9x^2y}}{3x^2}}$
$\sqrt{\frac{5}{2}}+\sqrt{\frac{2}{5}}$	$\left(\frac{\sqrt{5}}{\sqrt{2}}+\frac{\sqrt{2}}{\sqrt{5}}\right)\sqrt{10} =$ ← not a property of equality $\frac{\sqrt{50}}{\sqrt{2}}+\frac{\sqrt{20}}{\sqrt{5}} = \sqrt{25}+\sqrt{4} = 5+2$ $= \boxed{7}$	$\frac{\sqrt{5}\cdot\sqrt{2}}{\sqrt{2}\cdot\sqrt{2}} + \frac{\sqrt{2}\cdot\sqrt{5}}{\sqrt{5}\cdot\sqrt{5}}$ $\frac{\sqrt{10}\cdot 5}{2\cdot 5}+\frac{\sqrt{10}\cdot 2}{5\cdot 2} = \frac{5\sqrt{10}}{10}+\frac{2\sqrt{10}}{10}$ $= \boxed{\frac{7\sqrt{10}}{10}}$
$\sqrt{\frac{3}{7}}+\sqrt{\frac{7}{3}}$	$\frac{\sqrt{3}\cdot\sqrt{7}}{\sqrt{7}\cdot\sqrt{7}}+\frac{\sqrt{7}\cdot\sqrt{3}}{\sqrt{3}\cdot\sqrt{3}} =$ $\boxed{\frac{\sqrt{21}}{7}+\frac{\sqrt{21}}{3}}$ keep going	$\frac{\sqrt{21}\cdot 3}{7\cdot 3}+\frac{\sqrt{21}\cdot 7}{3\cdot 7}$ $\frac{3\sqrt{21}}{10}+\frac{7\sqrt{21}}{10} = \boxed{\frac{10\sqrt{21}}{10}}$

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$\sqrt[3]{54x^5}$	$\sqrt[3]{27\cdot 2\cdot x^3\cdot x^2}$ $\boxed{2x^2\cdot\sqrt[3]{3x}}$ switched places	$\sqrt[3]{27\cdot 2\cdot x^3\cdot x^2}$ $\boxed{3x\cdot\sqrt[3]{2x^2}}$
$\dfrac{\sqrt{18}-\sqrt{6}}{\sqrt{3}}$	$\dfrac{\sqrt{18}}{\sqrt{3}}-\dfrac{\sqrt{6}}{\sqrt{3}}=\dfrac{\cancel{3}\sqrt{2}}{\cancel{\sqrt{3}}}-\dfrac{\sqrt{6}}{\sqrt{3}}$ $=\sqrt{2}-\sqrt{2}$ $=\boxed{0}$	$\dfrac{\sqrt{3\cdot 6}-\sqrt{3\cdot 2}}{\sqrt{3}}=\dfrac{\cancel{\sqrt{3}}(\sqrt{6}-\sqrt{2})}{\cancel{\sqrt{3}}}$ $=\boxed{\sqrt{6}-\sqrt{2}}$
$\sqrt[3]{\dfrac{8x}{3y^5}}$	$\dfrac{\sqrt[3]{8x}}{\sqrt[3]{3y^5}}=\dfrac{2\sqrt[3]{x}}{y\sqrt[3]{3y^2}}\cdot\dfrac{\sqrt[3]{9y}}{\sqrt[3]{9y}}$ $=\boxed{\dfrac{2\sqrt[3]{9xy}}{3y^1}}$	$\dfrac{2\sqrt[3]{9xy}}{y(\sqrt[3]{27y^3})}=\dfrac{2\sqrt[3]{9xy}}{y(3y)}$ $=\boxed{\dfrac{2\sqrt[3]{9xy}}{3y^2}}$
$\sqrt[3]{24}-\sqrt[3]{56}+\sqrt[3]{81}$	$\sqrt[3]{8\cdot 4}-\sqrt[3]{8\cdot 7}+\sqrt[3]{9\cdot 9}$ $\boxed{2\sqrt[3]{4}-2\sqrt[3]{7}+3\sqrt[3]{9}}$	$\sqrt[3]{8\cdot 3}-\sqrt[3]{8\cdot 7}+\sqrt[3]{27\cdot 3}$ $2\sqrt[3]{3}-2\sqrt[3]{7}+3\sqrt[3]{3}$ $\boxed{5\sqrt[3]{3}-2\sqrt[3]{7}}$