

Name: KEY

Section 2.3 – Proficiency Check

Add or Subtract the following Radicals:

Emerging	Emerging
$\sqrt{12} + \sqrt{75} - \sqrt{48}$ $\sqrt{3}\sqrt{4} + \sqrt{3}\sqrt{25} - \sqrt{16}\sqrt{3}$ $2\sqrt{3} + 5\sqrt{3} - 4\sqrt{3}$ $7\sqrt{3} - 4\sqrt{3}$ $\boxed{3\sqrt{3}}$	$\sqrt[3]{16} + 3\sqrt[3]{128}$ $\sqrt[3]{8}\sqrt[3]{2} + 3\sqrt[3]{64}\sqrt[3]{2}$ $2\sqrt[3]{2} + 3 \cdot 4\sqrt[3]{2}$ $2\sqrt[3]{2} + 12\sqrt[3]{2}$ $\boxed{14\sqrt[3]{2}}$

Proficient	Extending
$-y\sqrt{24x^3y} - 3x\sqrt{96xy^3}$ $-y\sqrt{4}\sqrt{6}\sqrt{x^2}\sqrt{x}\sqrt{y}$ $-3x\sqrt{16}\sqrt{6}\sqrt{x}\sqrt{y^2}\sqrt{y}$ $-2xy\sqrt{6xy} - 3xy \cdot 4\sqrt{6xy}$ $-2xy\sqrt{6xy} - 12xy\sqrt{6xy}$ $\boxed{-14xy\sqrt{6xy}}$	$2x\sqrt{12} - 2\sqrt[3]{192x^4} + \sqrt{507x^3} + 2x\sqrt[3]{1536x}$ $2x\sqrt{4}\sqrt{3} - 2\sqrt[3]{64}\sqrt[3]{3}\sqrt[3]{x^4} + \sqrt{169}\sqrt{3}\sqrt{x^3} + 2x\sqrt[3]{512}\sqrt[3]{3x}$ $4x\sqrt{3} - 8x\sqrt[3]{3x} + 13x\sqrt{3x} + 16x\sqrt[3]{3x}$ $4x\sqrt{3} + 13x\sqrt{3x} + 8x\sqrt[3]{3x}$