

Lesson 8

$$1) 3\sqrt{80} + 4\sqrt{63} - 6\sqrt{180} - 4\sqrt{7}$$

$$3\sqrt{2^4 \cdot 5} + 4\sqrt{3^2 \cdot 7} - 6\sqrt{2^2 \cdot 3^2 \cdot 5} - 4\sqrt{7}$$

$$3 \cdot 2^2 \sqrt{5} + 4 \cdot 3 \sqrt{7} - 6 \cdot 2 \cdot 3 \sqrt{5} - 4\sqrt{7}$$

$$12\sqrt{5} + 12\sqrt{7} - 36\sqrt{5} - 4\sqrt{7}$$

$$12\sqrt{5} - 36\sqrt{5} + 12\sqrt{7} - 4\sqrt{7}$$

$$\underline{-24\sqrt{5} + 8\sqrt{7}}$$

$$2) 5\sqrt[3]{ab^2} - 4\sqrt[3]{ab^2} - 8\sqrt[3]{ab^2} - 12\sqrt[3]{ab^2}$$

$$\underline{-19\sqrt[3]{ab^2}}$$

$$3) 3\sqrt{2xy^2} - 3\sqrt{18x^3} - (x+2y)\sqrt{2x}$$

$$3\sqrt{2xy^2} - 3\sqrt{3^2 \cdot 2x^3} - (x+2y)\sqrt{2x}$$

$$3y\sqrt{2x} - 3 \cdot 3x\sqrt{2x} - 2xy\sqrt{2x}$$

$$3y\sqrt{2x} - 9x\sqrt{2x} - 2xy\sqrt{2x}$$

$$\underline{-2xy + 9x + 3y\sqrt{2x}}$$

$$4) 7\sqrt{80} - 2\sqrt{800} - 5\sqrt{320} - \sqrt{450}$$

$$7\sqrt{2^4 \cdot 5} - 2\sqrt{2^5 \cdot 5^2} - 5\sqrt{2^6 \cdot 5} - \sqrt{2 \cdot 3^2 \cdot 5^2}$$

$$7 \cdot 2^2\sqrt{5} - 2 \cdot 2^2 \cdot 5\sqrt{2} - 5 \cdot 2^3\sqrt{5} - 1 \cdot 3 \cdot 5\sqrt{2}$$

$$28\sqrt{5} - 40\sqrt{2} - 40\sqrt{5} - 15\sqrt{2}$$

$$28\sqrt{5} - 40\sqrt{5} - 40\sqrt{2} - 15\sqrt{2}$$

$$\underline{-12\sqrt{5} - 55\sqrt{2}}$$