

Must show all steps and all work to earn full credit.

Multiply using the product rule.

$$1) \sqrt[3]{12x^4y^5} \cdot \sqrt[3]{18xy}$$

Simplify the expression.

$$2) \frac{12\sqrt{35}}{2\sqrt{5}}$$

Simplify. Assume that all variables represent positive real numbers.

$$3) -8\sqrt{6} - 6\sqrt{54}$$

$$4) \sqrt{5x} + 7\sqrt{80x} + 2\sqrt{180x}$$

$$5) 10\sqrt[4]{x^7} - 5x\sqrt[4]{x^3}$$