

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

Multiply, then simplify the product.

1) $(\sqrt{6} - 6)(\sqrt{5} + 3)$

2) $(6 + \sqrt[3]{2})(6 - \sqrt[3]{2})$

3) $(7 + \sqrt{3})^2$

Multiply, then simplify the product. Assume that all variables represent positive real numbers.

4) $(\sqrt{13} + 5)(\sqrt{13} - 5)$

Simplify by first writing the radicals with the same index. Then multiply.

5) $\sqrt{3} \cdot \sqrt[3]{4}$