

1. Perform the indicated operation. Simplify your answers.

a) $\sqrt{8} - \sqrt{32}$	b) $2\sqrt[3]{3a^4} - 3a\sqrt[3]{81a}$
c) $\sqrt[3]{\frac{11}{8}} - \frac{\sqrt[3]{11}}{6}$	d) $2\sqrt[3]{24x^3y^4} + 4x\sqrt[3]{81y^4}$
e) $\sqrt{5}(6 - \sqrt{5})$	f) $(\sqrt[3]{4} + 2)(\sqrt[3]{2} - 1)$

2. In your own words, describe how to add or subtract two radical expressions like you did in #1a-d .

3.

a) Add $\sqrt{5} + \sqrt{5}$ .	b) Multiply $\sqrt{5} \cdot \sqrt{5}$
c) Describe the differences in parts (a) and (b).	

4. Explain how simplifying  $2x + 3x$  is similar to simplifying  $2\sqrt{x} + 3\sqrt{x}$ .