

1. Simplify the following radicals.

$$\text{a) } 5\sqrt[3]{24} = 5\sqrt[3]{8}\sqrt[3]{3} = 5 \cdot 2\sqrt[3]{3} = 10\sqrt[3]{3}$$

$$\text{b) } 2\sqrt[3]{54} = 2\sqrt[3]{27}\sqrt[3]{2} = 2 \cdot 3\sqrt[3]{2} = 6\sqrt[3]{2}$$

$$\text{c) } 7\sqrt[3]{1000} = 7 \cdot 10 = 70$$

Sometimes the simplified form
is an integer!

$$\text{d) } 4\sqrt[4]{80} = 4\sqrt[4]{16}\sqrt[4]{5} = 4 \cdot 2\sqrt[4]{5} = 8\sqrt[4]{5}$$

$$\text{e) } 3\sqrt[5]{320} = 3\sqrt[5]{32}\sqrt[5]{10} = 3 \cdot 2\sqrt[5]{10} = 6\sqrt[5]{10}$$