1. Rewrite each of the following into radical form. Then simplify your answer in exact form.
   a) \(625^{\frac{1}{3}}\)  
   b) \(24^{\frac{1}{3}}\)  
   c) \(96^{\frac{1}{4}}\)  
   d) \((48x^{5})^{\frac{1}{2}}\)  
   e) \((abc)^{\frac{5}{2}}\)

2. Simplify each of the following. Leave your answers in exact form.
   a) \(\sqrt[3]{375}\)  
   b) \(8\sqrt[6]{64}\)  
   c) \(\sqrt[3]{-189}\)  
   d) \(-\sqrt[4]{112}\)  
   e) \(\sqrt[3]{-135}\)  
   f) \(-8\sqrt[4]{48}\)  
   g) \(6\sqrt[3]{432}\)  
   h) \(5\sqrt[4]{243}\)

3. Simplify each of the following. Leave your answers in exact form.
   a) \(\sqrt[4]{256a^6}\)  
   b) \(\sqrt[5]{224x^9}\)  
   c) \(\sqrt[5]{-96x^5}\)  
   d) \(\sqrt[4]{64n^5}\)  
   e) \(\sqrt[4]{256x^{16}}\)  
   f) \(\sqrt[3]{10x^6y^9}\)
Example #3 Continued…

\( g) \sqrt[3]{486m^3n^3} \quad h) \ 2\sqrt[3]{-81x^3y^2} \quad i) \ -7\sqrt[3]{320n^3} \)

\( j) \sqrt[3]{64x^6y^{12}} \quad k) \ 6\sqrt[5]{1000a^4c^5} \quad l) \ -\sqrt[3]{48x^7y^3z^{12}} \)

\( m) \sqrt[5]{-64x^8y^{11}z^5} \quad n) \sqrt[4]{405a^5b^3c} \)

4. **Multiple Choice** – Which of the following is equivalent to \(-6\sqrt[3]{80m^3n^7p^4}\) ?

(A) \(-24m^2n^3p^4 \sqrt[4]{5n}\)
(B) \(-24mnp^2 \sqrt[4]{mn^3p}\)
(C) \(-18m^4n^7p^4 \sqrt[4]{n^3}\)
(D) \(-18mnp^2 \sqrt[4]{n^3}\)

5. Simplify each of the following expressions. Your answers must be in exact form.

a) \(7\sqrt[3]{-320} - \sqrt[3]{135}\)  \quad b) \(\sqrt[4]{64} + 3\sqrt[4]{32}\)