Practice for Quiz 2 – Radicals

1. Evaluate using a calculator (give to 4 decimal places).

a. $32^{\frac{5}{2}}$

b. $\sqrt[4]{18}$

c. $6\sqrt[3]{70}$

2. Express each power as an equivalent entire radical.

a. $3^{\frac{2}{4}}$

b. $(9^4)^{\frac{3}{5}}$

c. $\left(\frac{x^2}{y^5}\right)^{\frac{-3}{4}}$

3. Write each radical as a power.

a. $\sqrt{(4y)^7}$

b. $\sqrt[3]{12x^4}$

c. $5\sqrt[3]{z^{\frac{4}{3}}}$

4. Write each mixed radical as an entire radical.

a. $6\sqrt{2}$

b. $\left(\frac{1}{2}\right)\sqrt{24}$

c. $3\sqrt[3]{4}$

5. Write each entire radical as a mixed radical.

a. $\sqrt{18}$

b. $\sqrt{200}$

c. $\sqrt[3]{128}$