

UNIT 1 – ROOTS AND POWERS*Quiz – Sections 4.4 and 4.5***K. Sears**

20**NAME:** _____**DATE:** _____1. Write each power as a radical then evaluate. **(6)**

a) $25^{\frac{1}{2}}$

b) $(-64)^{\frac{1}{3}}$

c) $81^{0.25}$

2. Write each radical as a power. **(2)**

a) $(\sqrt[4]{25})^3$

b) $(\sqrt{-3.6})^5$

3. Write each power as a radical then evaluate. **(4)**

a) $16^{\frac{5}{4}}$

b) $\left(\frac{36}{49}\right)^{\frac{3}{2}}$

4. Write each power with a positive exponent. **(2)**

a) $\left(\frac{1}{3}\right)^{-2}$

b) $\left(\frac{-5}{4}\right)^{\frac{-3}{2}}$

5. First, write each power with a positive exponent. At this point, write each power as a radical then evaluate. (6)

a) $\left(\frac{9}{4}\right)^{-\frac{5}{2}}$

b) $\left(\frac{16}{81}\right)^{-\frac{3}{4}}$

☺ GOOD LUCK!!! ☺