Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4.1-4.2 Quiz (Exponents and Radicals)**

1. Evaluate the following:

a) $\sqrt{(36)(9)}$ b) $\sqrt[3]{\frac{64}{8}}$ c) $\frac{9^{2}}{3^{3}}$

2. Determine whether each number is a perfect square, perfect cube, both or neither:

a) 324 b) 4096

3. Simplify:

a) $(\frac{3^{5}}{3^{-8}})^{4}$ b) $[(2^{5})(2^{4})]^{-2}$