

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

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

**Learning Goal 5.2**

Use exponent laws to evaluate expression with positive and negative rational exponents.

Evaluate each power without using a calculator.

a.  $1000^{1/3}$

b.  $0.25^{1/2}$

c.  $\left(\frac{16}{81}\right)^{1/4}$

Simplify.

a.  $0.01^{3/2}$

b.  $(-27)^{4/3}$

c.  $81^{-3/4}$

d.  $0.75^{1.2}$

e.  $(-32)^{-0.4}$

f.  $1.8^{-1.4}$