

**QUICK REVIEW #6 – CHAIN RULE**

Name \_\_\_\_\_

Date \_\_\_\_\_ Hour \_\_\_\_\_

**1. Find the derivative of each of the following:**

\_\_\_\_\_ a.  $f(x) = \sqrt{x^2 + 1}$

\_\_\_\_\_ b.  $f(x) = \left(\frac{x^2}{x^3+1}\right)^3$

\_\_\_\_\_ c.  $f(x) = (x^2 + 5x + 8)^3$

\_\_\_\_\_ d.  $f(y) = x^3\sqrt{x^2 - 5}$

\_\_\_\_\_ e.  $f(y) = \sqrt[5]{3y^3 + 2y^2}$