

**QUICK REVIEW #8 – EQUATION OF THE TANGENT LINE**

Name \_\_\_\_\_

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

**1. Find the equation of the line tangent to the graph at the given location.**

\_\_\_\_\_ a.  $y = x^3 - 3x$  at  $x = 3$

\_\_\_\_\_ b.  $y = 4 - 3x - x^2$  at  $(0, 4)$

\_\_\_\_\_ c.  $y = (x^2 + 4x + 4)^2$  at  $x = -2$

**2. Find the equation of the normal to the graph of:**

\_\_\_\_\_ a.  $y = \frac{3x+5}{x-1}$  at  $x = 3$

**3. Find the equation of the tangent to the graph of:**

\_\_\_\_\_ a.  $y = \sqrt{x^3 - 15}$  at  $(4, 7)$