

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_

**ACTIVITY #1**

Test I. Evaluate each rational expression using indicated values for the variables.

1.  $\frac{n^2-1}{39n}$        $a \cdot n = 3$        $b \cdot n = -3$

2.  $\frac{6+h-h^2}{4h-8}$        $a \cdot h = 3$        $b \cdot h = -3$

3.  $\frac{p^2-pq}{q+p}$        $a \cdot p = 3 ; q = -1$        $b \cdot p = -3; q = 1$

Test II. Find every value of the variable that makes each rational expression undefined.

4.  $\frac{3x}{x^2-121}$        $x \neq$

5.  $\frac{x+2}{(x-2)(x+1)}$        $x \neq$

6.  $\frac{(x-3)(x+2)}{x^2-5x-6}$        $x \neq$

Test III: Reduce each to its lowest term.

$$7. \frac{a-b}{a^2-b^2}$$

$$8. \frac{5x^2-20}{6x+12}$$

$$9. \frac{5x(2x+1)}{7x(8x+4)}$$