Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Rational Algebraic Expressions

A. Choose the letter of the correct answer.

For numbers 1–3, evaluate the given rational expression.

1. $\frac{7}{14x-28}$ when $x = 3$

   a. $\frac{1}{4}$ b. $\frac{1}{3}$ c. $\frac{1}{2}$ d. 1

2. $\frac{4y}{y+6}$ when $y = 1$

   a. $\frac{3}{7}$ b. $\frac{4}{7}$ c. $\frac{5}{7}$ d. $\frac{6}{7}$

3. $\frac{2m+3}{8+m}$ when $m = 2$

   a. $\frac{1}{2}$ b. $\frac{3}{5}$ c. $\frac{7}{10}$ d. $\frac{4}{5}$

For numbers 4–7, solve the value of the variable that makes the rational expression undefined.

4. $\frac{4}{x-25}$

   a. 4 b. 5 c. 10 d. 25

5. $\frac{x-2}{2x-3}$

   a. $\frac{1}{2}$ b. $\frac{3}{4}$ c. $\frac{3}{2}$ d. $\frac{5}{2}$

6. $\frac{q}{2q+3}$

   a. $-\frac{1}{2}$ b. -1 c. $-\frac{4}{3}$ d. $-\frac{3}{2}$

7. $\frac{2x-5}{5-x}$

a. -4 b. -2 c. 2 d. 5

B. Solve for the value of the variable that makes each expression undefined. Write your solution on the space for each number.

1. $\frac{3x^2}{x+3}$ 2. $\frac{2}{(X+3)(X-3)}$ 3. $\frac{C}{5-C}$