**ALGEBRA 2** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_ Date: \_\_\_\_\_\_\_

Unit 6 Quiz Review – Rational Functions

1. Solve by eliminating the denominator. Check for extraneous roots.

a)  b) 

2) Solve by cross multiplying. Check for extraneous roots.

a)  b) 

3) Perform the indicated operation and simplify (you may leave in factored form):

a)  b) 

c) 

4) Simplify the rational expressions (you may leave in factored form):

a)  b) 

5) Use your knowledge of transformations to compare the graph of the function given with the graph of y = 1/x. State how the given graph is translated.

y =  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6) Investigate the following function: f**(x) = **

Describe Transformations: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vertical Asymptote: x = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Horiz. Asymptote: y = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Domain: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Trans. Locator Pts: \_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_