



Date:

Section:

Objective:

Rational Function:

Domain of a Rational Function:

★ .

Examples: Find the domain of the following rational expressions.

a) $\frac{2x+1}{x-3}$

b) $\frac{x+3}{7}$

c) $\frac{(2x+1)(x-4)}{(x+4)(2x+1)}$

d) $\frac{5x+1}{(x-4)(3x+2)}$

Simplify rational expressions:

1.

2.

3.

Examples: Simplify each rational expression. (Talk about domain.)

a) $\frac{2x+1}{2x-1}$

b) $\frac{x+2}{x+2}$

c) $\frac{x+2}{(x+2)(3x-1)}$

d) $\frac{(4x+1)(x-3)}{x-3}$

e) $\frac{(2x-7)(3x+1)}{(3x+1)(x-8)}$

f) $\frac{8(x+4)}{8}$