

## I. Rational Functions (p.405):

1.  $R(x) = \frac{P(x)}{Q(x)}$  both  $P(x)$  &  $Q(x)$  are polynomials
2.  $Q(x) = 0 \Rightarrow R(x)$  is undefined  
*i.e.*,  $D = \{x \mid Q(x) \neq 0\}$

## II. Examples (pp.413-414): Exercises #12,28,40,48

## III. Arithmetic w/Rational Expressions, Part 1:

### 1. Multiplication –

$$A. \quad \frac{p_1}{q_1} \times \frac{p_2}{q_2} = \frac{p_1 \times p_2}{q_1 \times q_2}$$

### B. Example (p.414): Exercise #58

HW: pp.413-415/Exercises #1-11(odd),15,27,29,31,  
37,41,43,47,53,57