I. Rational Functions (p.405):

1. $R(x) = \dfrac{P(x)}{Q(x)}$ 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. $\dfrac{p_1}{q_1} \times \dfrac{p_2}{q_2} = \dfrac{p_1 \times p_2}{q_1 \times q_2}$

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

2. Division –

   A. $\dfrac{p_1}{q_1} \div \dfrac{p_2}{q_2} = \dfrac{p_1}{q_1} \times \dfrac{q_2}{p_2}$ ☜ $\dfrac{q_2}{p_2}$ is the "_____" of $\dfrac{p_2}{q_2}$

   B. Examples (pp.414-415): Exercise #78,80

HW: pp.413-415/Exercises#~~1-11(odd),15,27,29,31,~~
~~37~~,41,~~43,47,53,57~~,77,81,85

Read pp.418-425 (section 6.2)

IV. Graphing R(***x***): see p.407

1. Not covered on any quiz/exam
2. Non-continuous, asymptotes, Domain restrictions, etc.
3. Examples (pp.413-414): Exercises #18-26(even)
4. Example: graph R(***x***) = 1/***x***

I. Arithmetic w/Rational Expressions, Part 2:

1. Addition & Subtraction (w/common denominator) –

   A. $\frac{a}{d} \pm \frac{b}{d} = \frac{a \pm b}{d}$

   B. Examples (p.426): Exercise #6,12

HW: p.426 / Exercises #3,5,9-15(odd)
Read pp.422-425 (section 6.2)