

# Class #32 - Fri Nov 12

- schedule
  - Midterm conferences.
  - WebWork
- Exam #2 - next week
- move "rational expressions" <sup>Exam #2</sup>
  - adding/subtracting
  - simplifying "complex fractions"

Monday @ last day!

- finish "Circles"
- "Parabolas Vertices - #"
- (re-opened to Tues)
- "Nonlinear Systems"

math

## Exam #2 - topics to review

- quadratic equations
- ~~parabolas~~
- parabolas
- circles
- nonlinear systems.

Quiz #3

quadratic formula  
factoring, Ct's  
complex #s

Solutions will be on OpenLab

# "Add Rational Expressions 2"

②

#1

$$\frac{7}{5p} - \frac{3}{11p^2} =$$

LCM:  $55p^2$

$$\rightarrow = \frac{7}{5p} \cdot \left(\frac{11p}{11p}\right) - \frac{3}{11p^2} \cdot \left(\frac{5}{5}\right)$$

$$= \frac{77p}{55p^2} - \frac{15}{55p^2}$$

$$= \frac{(77p - 15)}{55p^2}$$

use "10p<sup>2</sup>" as LCM

your WW

$$\frac{6}{5p} - \frac{7}{2p^2} =$$

"unlike denominators"  
LCM of "5p" and "2p<sup>2</sup>":  
"10p<sup>2</sup>"

$$= \frac{6}{5p} \cdot \left(\frac{2p}{2p}\right) - \frac{7}{2p^2} \cdot \left(\frac{5}{5}\right) =$$

$$= \frac{12p}{10p^2} - \frac{35}{10p^2} = \frac{12p - 35}{10p^2}$$

Exam # 2 - next week (Tues - Fri)

↑  
Exam  
posted

↑  
deadline  
to submit

Topics

① Solving quadratic equations

- factoring ("zero product property")

→ C+S and "square root property"

→ quadratic formula.

} Exam # 1  
Quiz # 3

② Quadratic polynomials and parabolas.

- x- and y-intercepts.

- vertex / axis of symmetry


→ by "C+S" and/or by vertex rule.

- sketching graphs

### ③ Circles

- equations  $(x-h)^2 + (y-k)^2 = r^2$
- sketching graphs
- C+S (to identify center/radius, given  $(x^2 + bx) + (y^2 + cy) + d = 0$ )

### ④ Nonlinear Systems

- solving algebraically (by substitution/elimination)
- \*  - also graphically (by graphing the given equations and finding points of intersection)