**Working a Field Together**

Two people working together to complete ***one*** job:

 For work problems: [work RATE]  [TIME worked] = [part of JOB DONE]

*Solving a Rational Equation*

*Using least common denominator (LCD)*

*Write the equation:*

*The sum of the parts of the job done must be equal to 1, the complete job.*

let *x =* time working together

Kenneth’s part + Jason’s part = 1 job completed

 of job done of job done

 $\frac{x}{6}$ + $\frac{x}{10}$ = 1

Multiply by the LCD, 30

5*x* + 3*x =* 30

8*x* = 30

*x* = 3.75

*x* = 3 hrs. 45 min.

Using the calculator:

To get $\frac{x}{6}$ ***x ÷* 6**

Write two equations:

*y*1 = ( $\frac{x}{6}$ ) + ($\frac{x}{10}$ )

*y2* = 1

Set Window

Xmin=0

Xmax=10

Xscl=1

Ymin=0

Ymax=10

Yscl=1

Xres=1

GRAPH equations

TRACE to intersection

Or 2nd TRACE to CALCULATE 5: Intersect

The intersection is at *x* = 3.75, *y* = 1