

Name: \_\_\_\_\_

Tying It All Together

Let's refer back to our original Real Life Example about the track statistics. Can you now determine how many years it will take after 1928 for the men and women's teams to be equal?

$$136.8 - .280y = 111.8 - .136y$$

**More Applications...**

Directions: For the following problems define your variables and write and solve each equation.

(1) The gym offers 2 plans: one where it costs \$1 to join and \$39.95 per month and one where it costs \$99 to join and \$29.95 per month. Which plan is the better deal for different length memberships?

(2) An airplane has 2,250 gallons of fuel in the left-wing tank and 3,100 gallons in the right-wing tank. Fuel is pumped from the right tank to the left tank at a rate of 50 gallons per minute. How long will it take until both tanks have the same amount of fuel?