

Making Predictions Using
Systems of Equations

STUDENT WORKSHEET

1. Record the equations of your trend lines:

$Y_1 =$ _____

$Y_2 =$ _____

2. At what point do the lines intersect? _____

a. What does the x coordinate tell you? _____

b. What does the y coordinate tell you? _____

3. Will the times for women and men ever be equal? _____

a. If so, after how many years? _____

4. Use the models above to predict the winning times for the Olympics in:

a. 2004 Men _____ Women _____

b. 2024 Men _____ Women _____

5. The actual winning times in 2004 were 10.93 for women and 9.85 for men. Does this data fit your prediction? Why? _____

6. What possible explanation could you give for your answer in question 5? _____

