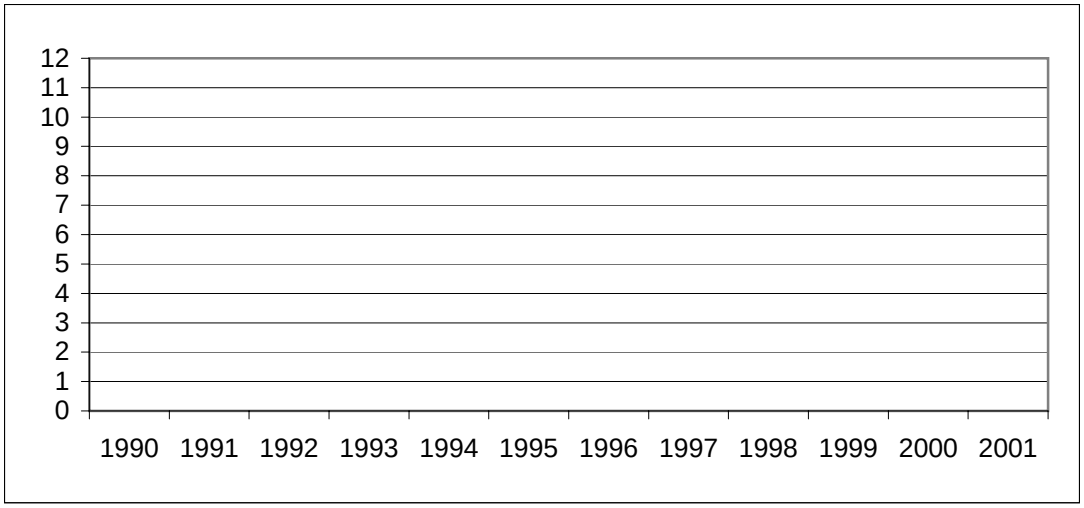
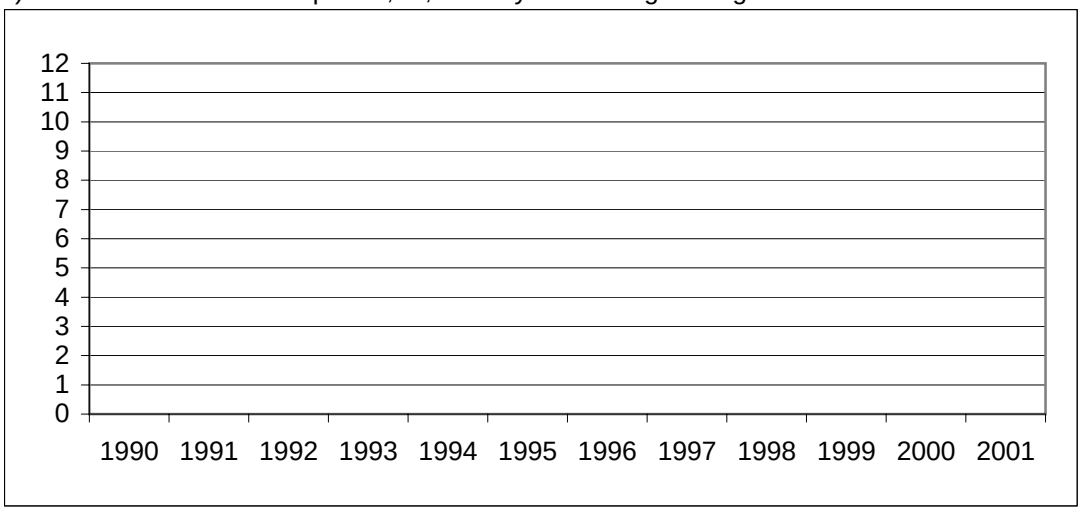
Exercise 1A. From 1990 to 2001, the observed incidence rate of cancer of the eyelashes (expressed in cases per 100,000 per year) in a large mid-western state with constant population were: 3,7,8,7,4,10,8,9,7,12,8,10

1) Plot the annual rates and interpret what you see.



Interpretation:

2) Calculate and plot 2-, 3-, and 4-year moving averages for the same data



Interpretation:

Exercise 1B: You have $20 in savings. You earn 5% interest, compounded annually. How much money will your savings account have after 3 years?

After 1 year:

After 2 years:

After 3 years:

Exercise 1C. The incidence rate of eyelash cancer in a small southern state in 1990 was 10 per 100,000.

1) If the rate increased the same absolute amount each year (10% of 1990 baseline, or 1 case per 100,000), what would the rate be in each of the next 3 years?

1991:

1992:

1993:

2) If the rate increased 10% per year, what would the rate be in 1991, 1992, 1993?

1991:

1992:

1993: