Lines of Fit: Practice D

1. Look at the data in the table below

x	0	4	8	13	17	22
y	34	27	16	8	5	-3

Which of the following describes the slope of the line of best fit for this data?

a. The slope is positive

b. The slope is negative

c. The slope is zero

d. The slope is undefined

2. Look at the graph below with a line of best fit already drawn in. Answer the questions:

Earnings at Work

Dollars Earned

Hours Worked
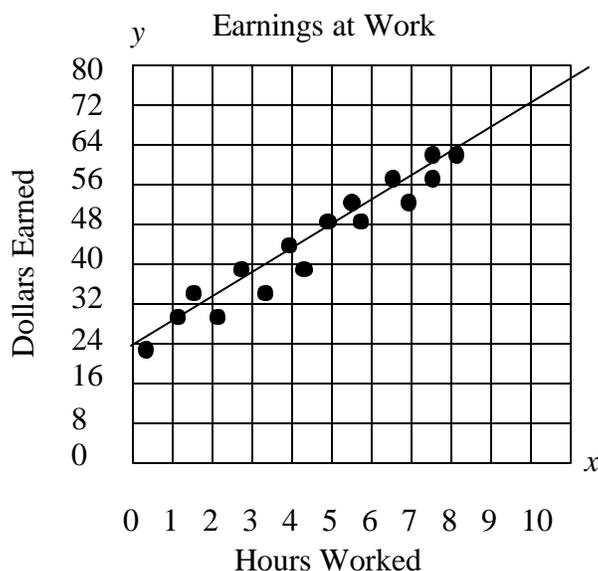
Questions about the Line of Fit

1. How many dollars did Jim earn for working 5 hours?

2. Using your line of fit, predict how many dollars Jim will earn for working 10 hours.

3. Is the slope of your line of fit positive or negative?

4. According to the line of fit, when Jim's hours increase by 5, how much do his earnings increase?

3. What calculator buttons do you need to push to find the equation of a line of best fit?

4. Every year since 1998, Number of cases of Chicken Pox has declined.

Year	Year since 1998	Cases of Chicken Pox (millions)
1998		10
1999		9
2000		7.2
2001		6.5
2002		5.8
2003		5.0
2004		4.0
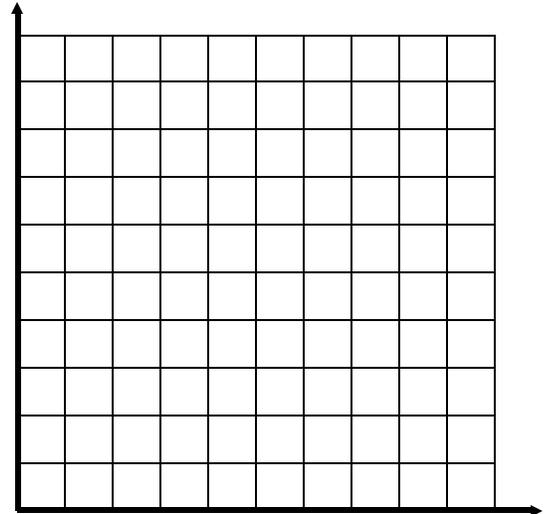
a) Label each axes shown above with <u>numbers</u> and <u>words</u>!

b) Plot the points on the graph

c) Find the equation of the line of best fit by using the calculator.

d) Predict how many cases of chicken pox (in millions) there will be in the year 2010

5. Look at the table shown below:

x	-10	-7	-4	1	4	5
y	3	5	12	13	17	19

a. What is the equation of the line of best fit?

b. Predict what y will be when x = 25 (approximately)

c. Predict what x will be when y = -12 (approximately)

6.

The scatter plot below shows the relationship between the number of bags of popcorn that are sold and the price per bag.

POPCORN SALES

Number Sold

Price
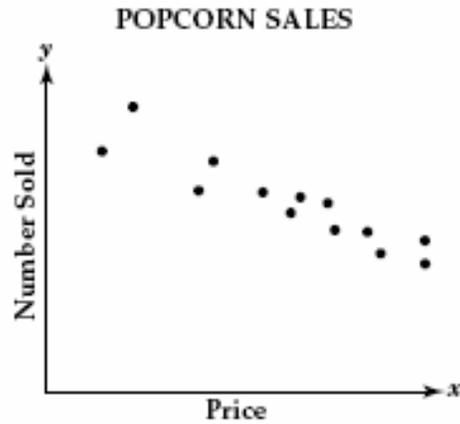
Which of these graphs shows the line of best fit?

A   POPCORN SALES

Number Sold

Price

C   POPCORN SALES

Number Sold

Price

B   POPCORN SALES

Number Sold

Price

D   POPCORN SALES

Number Sold

Price
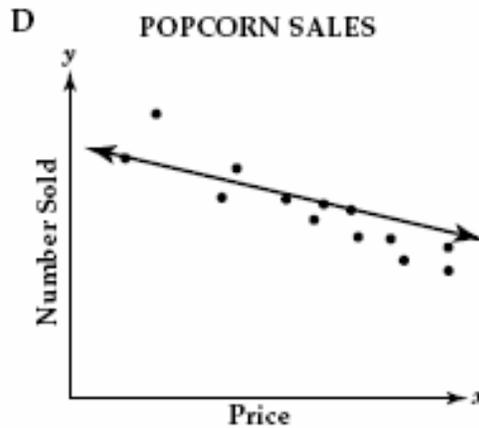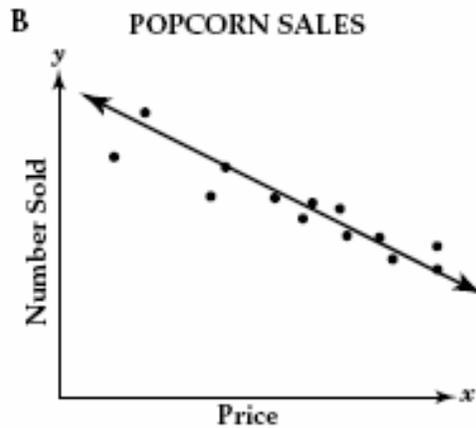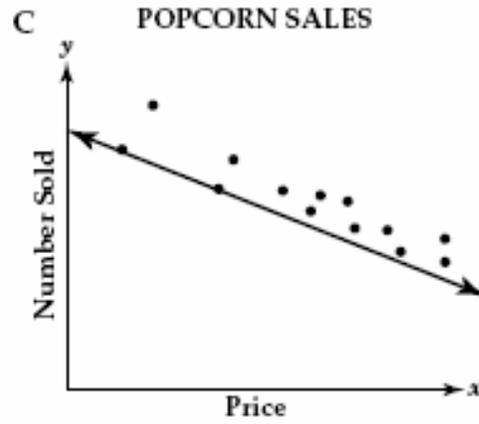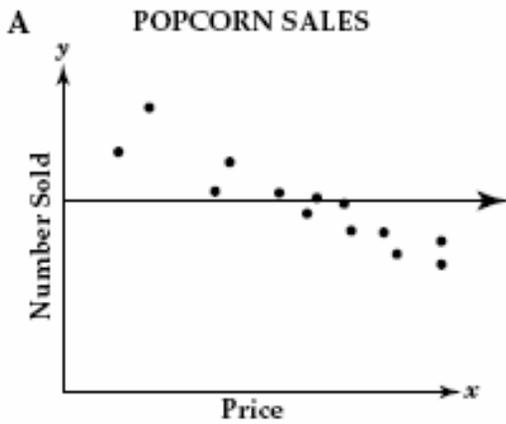
7. The scatter plot below shows the relationship between games played and tickets won.

Tickets Won

Games Played

Which of the graphs below represents the line of best fit?

A)

Tickets Won

Games Played

B)

Tickets Won

Games Played

C)

Tickets Won

Games Played
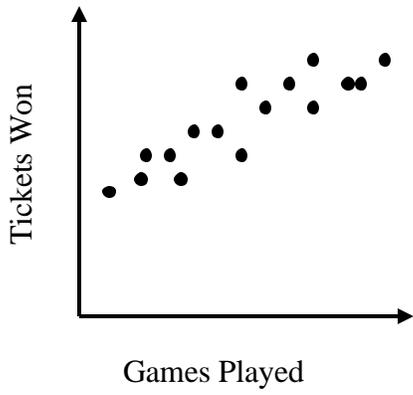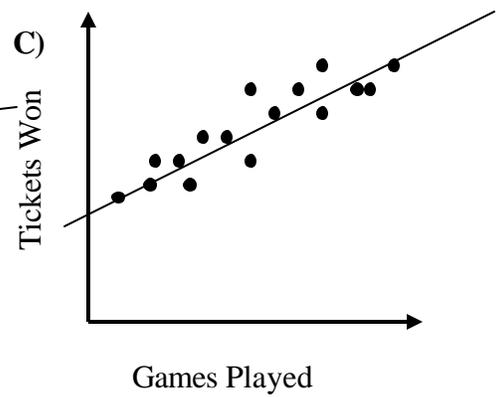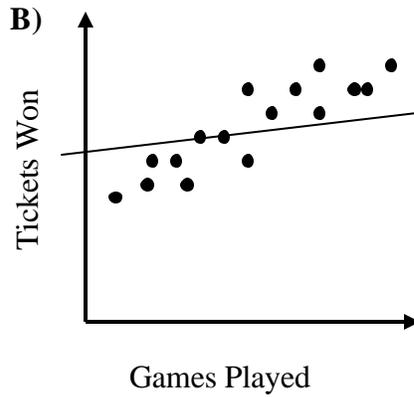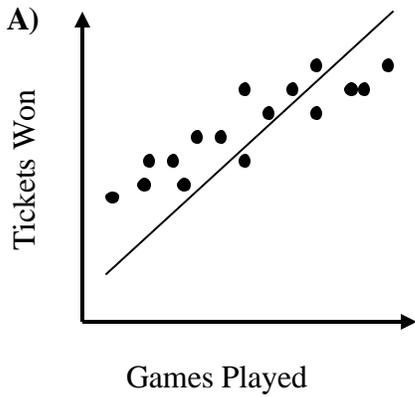
8. The scatter plot below shows the relationship between hours spent shopping and money.

Money

Hours Spent Shopping

Which of the graphs below represents the line of best fit?

A)

Money

Hours Spent Shopping

B)

Money

Hours Spent Shopping

C)

Money

Hours Spent Shopping