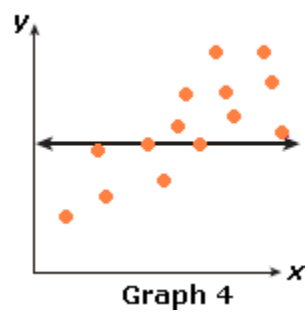
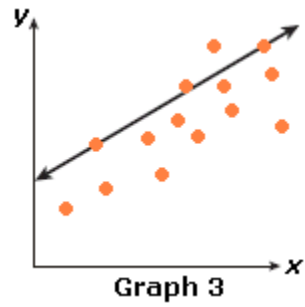
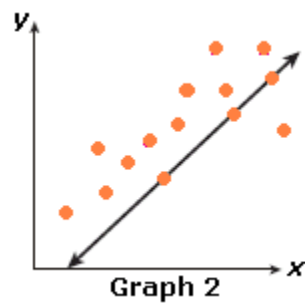
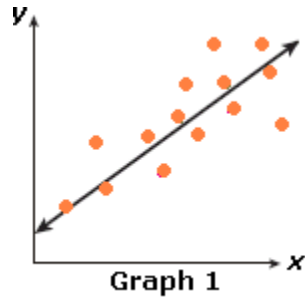


5. Choose the graph where the line best fits the data points given.

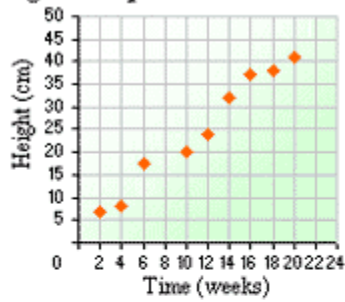


- a.  Graph 1 (go to # 2)
- b.  Graph 4 (go to #9)
- c.  Graph 2 (go to #6)
- d.  Graph 3 (go to #10)

2. Ben measured the height of a particular plant at two-week intervals in different situations. The table shows the data. Make a scatter plot for the data.

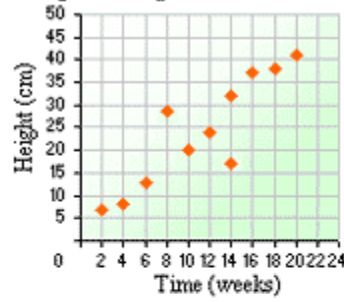
Time (in weeks)	Height (cm)
2	7
4	8
6	13
8	19
10	20
12	24
14	32
16	37
18	38
20	41

Height of the plant at two-week intervals



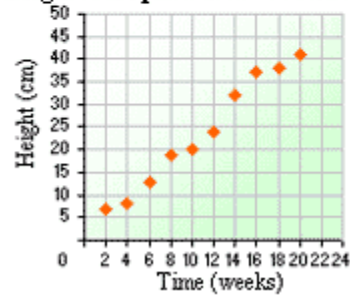
Graph 1

Height of the plant at two-week intervals



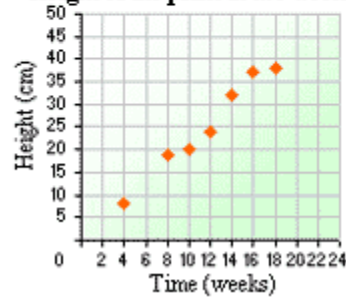
Graph 2

Height of the plant at two-week intervals



Graph 3

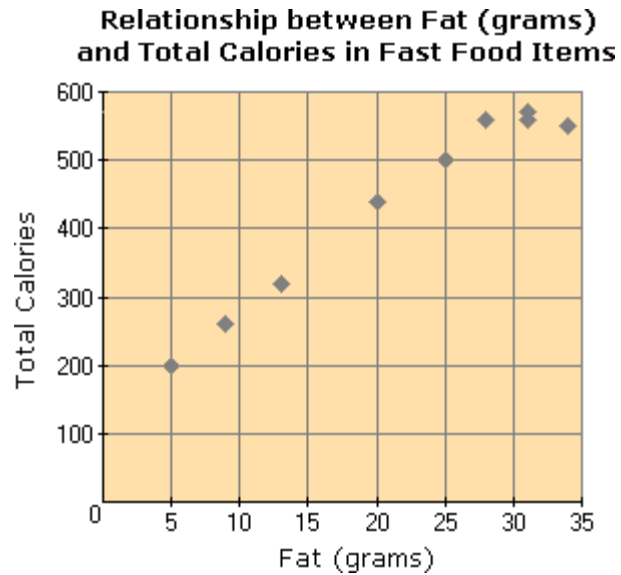
Height of the plant at two-week intervals



Graph 4

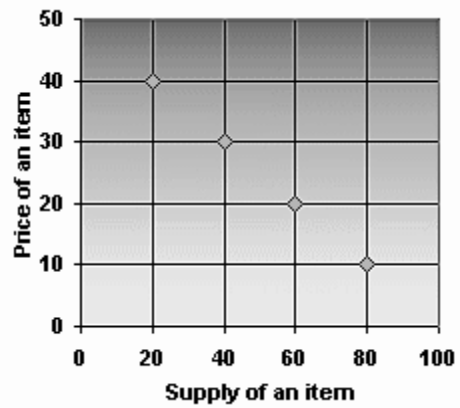
- a.  Graph 2 (go to #9)
- b.  Graph 4 (go to # 1)
- c.  Graph 3 (go to #8)
- d.  Graph 1 (go to #5)

8. The scatter plot shows the relationship between the fat (grams) and the total calories in different types of fast food items. Predict the total number of calories in a food item containing 15 grams of fat.



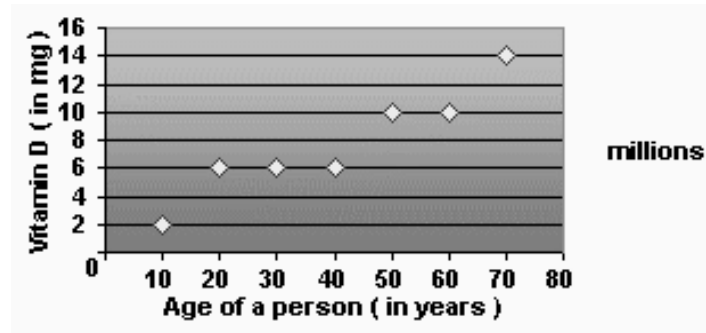
- a.  about 200 (go to #3)
- b.  about 580 (go to #5)
- c.  about 350 (go to #10)
- d.  about 300 (go to #6)

10. The graph depicts the relation between the price and the supply of an item. What model does the graph follow?



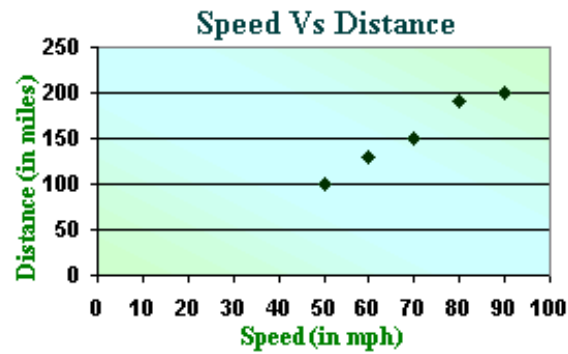
- a.  Positive Quadratic Model (go to #5)
- b.  Negative Quadratic Model (go to #6)
- c.  Positive Linear Model (go to #4)
- d.  Negative Linear Model (go to #3)

3. The scatter plot represents the requirement of Vitamin D by a person at various stages in his or her life. What model does the graph seem to follow?



- a.  Cubic (go to #7)
- b.  Quadratic (go to #8)
- c.  Linear (go to #2)
- d.  Constant (go to #5)

7. The scatter plot represents the distance traveled by Andrew at different speeds in a given time. Which of the tables represents the values plotted in the scatter plot?



Speed	50	60	70	80	90
Distance	100	130	150	190	200

**Figure 1**

Speed	50	60	70	80	90
Distance	130	100	130	190	200

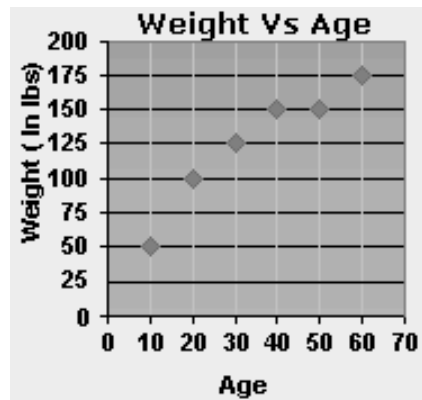
**Figure 2**

Speed	50	60	70	80	90
Distance	100	150	130	200	190

**Figure 3**

- a.  Figure 1 (go to #1)
- b.  Figure 2 (go to #10)
- c.  Figure 3 (go to #8)
- d.  None of the above (go to #3)

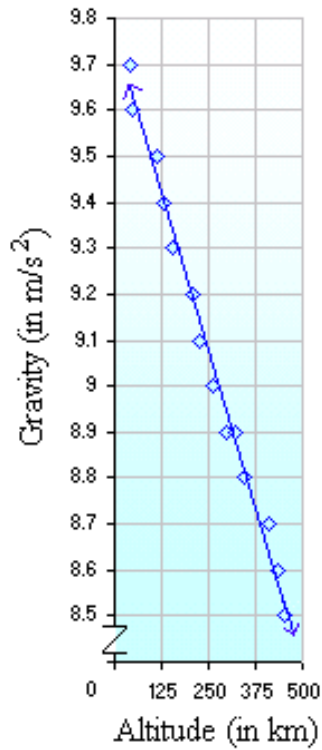
1. The scatter plot displays the weight of Josh as he grew old. What model does this graph seem to follow?



- a.  Quadratic (go to #5)
- b.  Linear (go to #3)
- c.  Square root (go to #4)
- d.  Constant (go to #2)

4. Use the scatter plot and the trend line to find the approximate value of the altitude that corresponds to the gravity of  $9.25 \text{ m/s}^2$ .

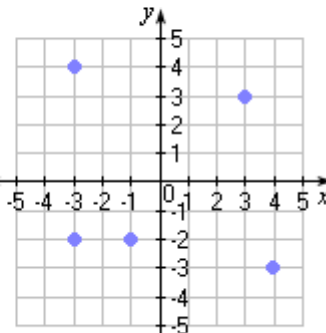
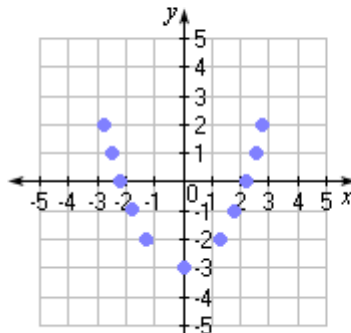
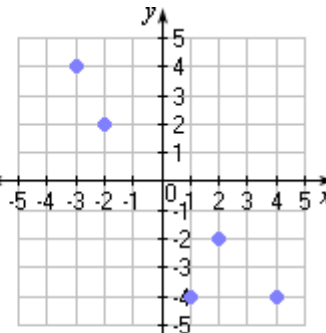
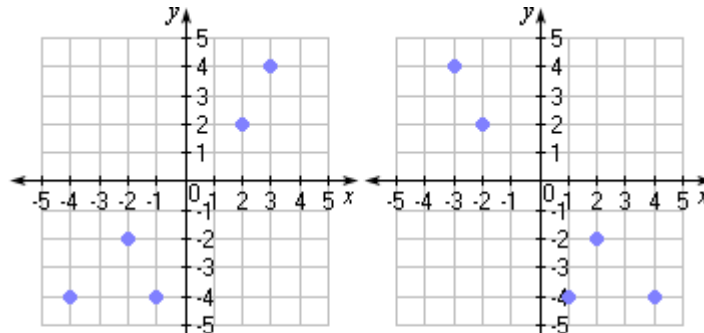
**Gravity changes with altitude**



- a.  250 km (go to #10)
- b.  240 km (go to #5)
- c.  130 km (go to #3)
- d.  186 km (go to #6)



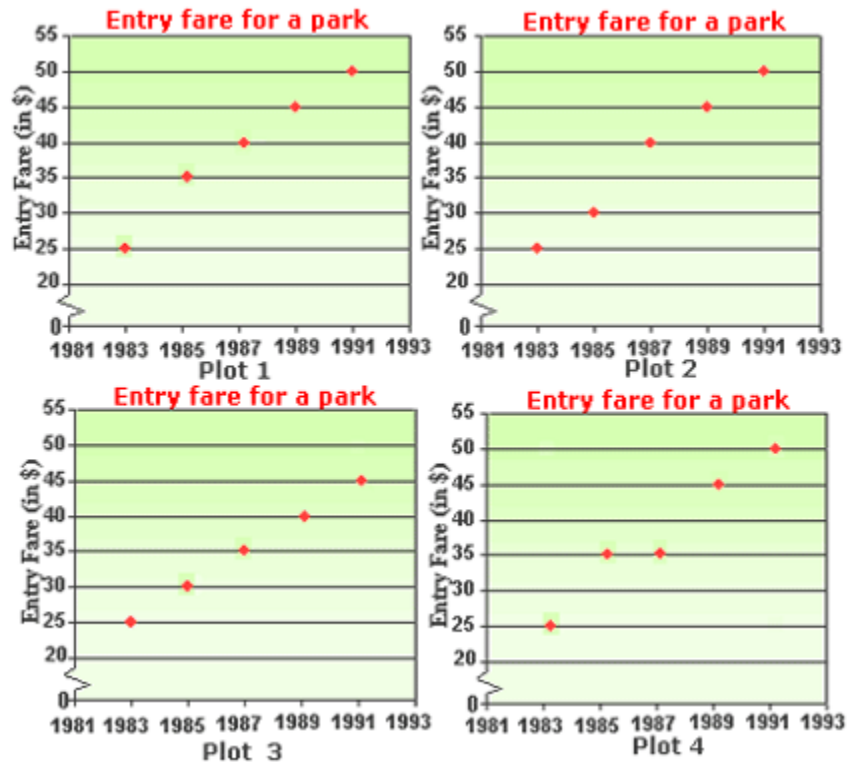
6. Identify the graph that could be modeled with a linear model.



- a.  Both Graph 1 and Graph 2 (go to #9)
- b.  Graph 3 (go to #7)
- c.  Graph 4 (go to #3)
- d.  All (go to #1)

9. The cost of entry to an amusement park during 5 years is given in the table below. Pick an appropriate scatter plot that shows the exact trend followed in the table.

Year	Entry fare (\$)
1983	25
1985	30
1987	40
1989	45
1991	50



- a.  Plot 1 (go to #6)
- b.  Plot 2 (go to #5)
- c.  Plot 3 (go to #4)
- d.  Plot 4 (go to #8)

**Trail – 1.1 Modeling Functions**

**Problem #:**

**Answer:**

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**Trail – 1.1 Modeling Functions**

**Problem #:**

**Answer:**

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## Trail – 1.1 Modeling Functions

### ORDER OF ANSWERS:

5  
2  
8  
10  
3  
7  
1  
4  
6  
9

*Note to Teacher:* Post problems around the room in numerical order. Students solve the problem and go to the # matching their answer.