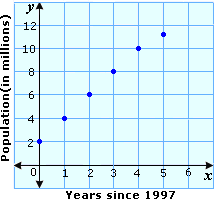
**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_**

**Positive and Negative Correlation**

**1.   The scatter plot shows the population of California from 1997 to 2002. What kind of correlation exists between them?  
  
**

|  |  |
| --- | --- |
|  | Inverse correlation |
|  | No correlation |
|  | Negative correlation |
|  | Positive correlation |

**Correct answer : (4)**

**2.   What kind of correlation does the statement describe?  
"As the number of workers increases, the number of days required to complete a work decreases (assume each person work at same rate.)"**

|  |  |
| --- | --- |
|  | Strongly positive correlation |
|  | Positive correlation |
|  | Negative correlation |
|  | No correlation |

**Correct answer : (3)**

**3.   Positive correlation means \_\_\_\_\_\_.**

|  |  |
| --- | --- |
|  | points can be approximated by a line with a negative slope |
|  | points can be approximated by a line with a positive slope |
|  | points that cannot be approximated by a line |
|  | points can be approximated by a curve |

**Correct answer : (2)**

**4.   Negative correlation means \_\_\_\_\_\_\_.**

|  |  |
| --- | --- |
|  | points that can be approximated by a line with a positive slope |
|  | points that cannot be approximated by a line |
|  | points that can be approximated by a line with a negative slope |
|  | points can be approximated by a curve |

**Correct answer : (3)**

**5.   Points that cannot be approximated by a line have**

|  |  |
| --- | --- |
|  | negative correlation |
|  | positive correlation |
|  | either positive or negative correlation |
|  | no correlation |

**Correct answer : (4)**

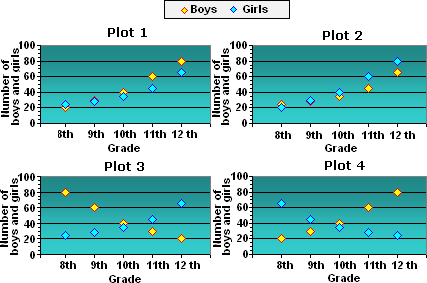
**6.   The number of women competing in a beauty contest from 1995 to 1999 is shown in the table. Is it reasonable to represent the data by an equation of the best fitting line?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | 1995 | 1996 | 1997 | 1998 | 1999 |
| Number of Women | 25 | 68 | 107 | 155 | 200 |

|  |  |
| --- | --- |
|  | No |
|  | Yes |

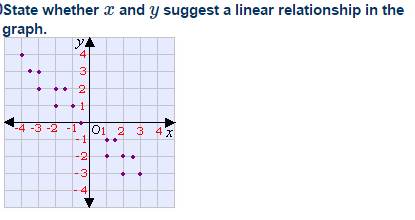
**7. The number of boys and girls in different grades of a school are given in the table. Pick the appropriate scatter plot for the data.**

|  |  |  |
| --- | --- | --- |
| Grades | Boys | Girls |
| 8th | 20 | 25 |
| 9th | 30 | 28 |
| 10th | 40 | 35 |
| 11th | 60 | 45 |
| 12th | 80 | 65 |

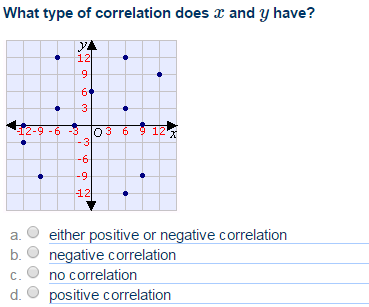
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|  |  |
| --- | --- |
|  | Plot 1 |
|  | Plot 2 |
|  | Plot 3 |
|  | Plot 4 |

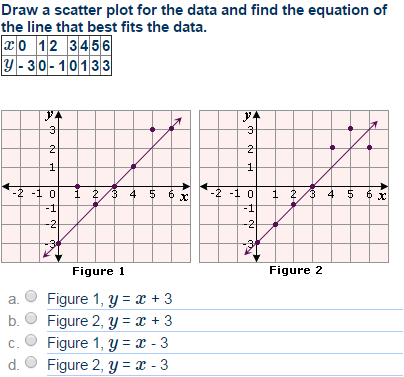
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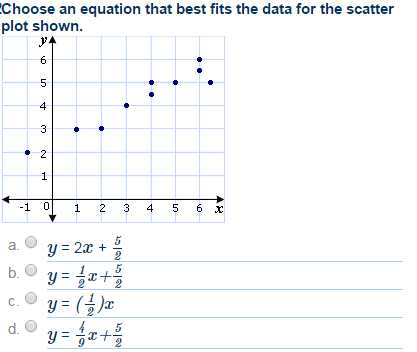
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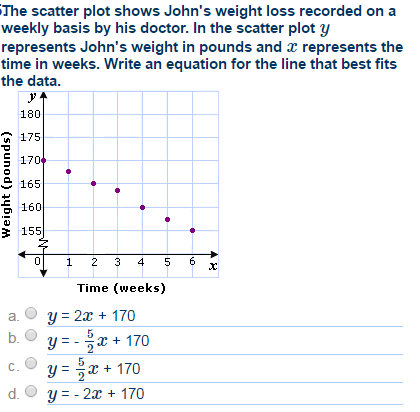
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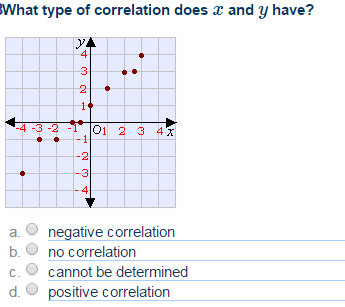
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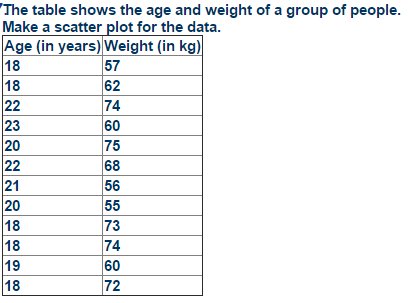
12.

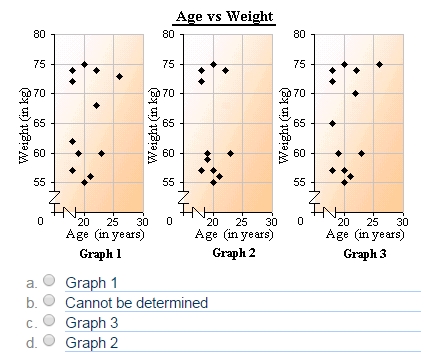


13.



14.





Key

1. D
2. C
3. B
4. C
5. D
6. B
7. A