

5) The two way table shows the places that females and males volunteered in the past month.

a) Complete the table with the missing values.

	Animal shelter	Hospital	Library	Total
Males	26	13	9	48
Females	21	17	14	52

$47 + 30 + 23 = 100$

b) Use the below to answer the following questions. The table is the results of a survey conducted on people and if they have a cell phone/MP3 player:

	MP3 Player	No MP3 Player	Total
Cell Phone	57	21	78
No Cell Phone	13	9	22
Total	70	30	100

What is the total number of data values?

100

What percentage of all people surveyed have a cell phone but no MP3 player?

$\frac{21}{100}$ 21%

7) Answer **TRUE** or **FALSE** for each statement.

a) A value of r near zero indicates there is a weak linear relationship between x and y . **TRUE**

b) A value of $r = -0.5$ indicates a weaker linear relationship between x and y than the value of $r = 0.5$. **FALSE**

c) A value of $r = 1$ indicates that there is a cause and effect relationship between x and y . **TRUE**

6) The table shows a data set that is obtained by collecting information about age and height of a group of children.

a) Draw a scatter plot of the data and determine on the line below what relationship, if any, exists in the data.

Age in years	3	5	8	11	12	10	4	9	6	7	11
Height in inches	36	40	45	56	64	52	37	51	42	44	60

b) Write the equation for the line of best fit. Round any values to the nearest thousandth.

c) What is the correlation coefficient rounded to the nearest thousandth? _____

8) Which of the below residual plots could show a linear fit?

Explain your answer.

No pattern.