Two Variable Analysis

Name: . . . .

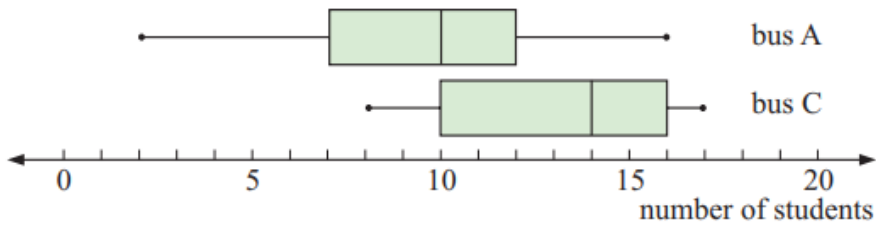**One variable Review:**

1. This box and whisker graph measures how many students rode each bus over a two-month period.

bus A

bus C

number of students

(b) What is the variable measured? . . . .

(c) Which bus would you rather ride on – A or C – and why?

(a) On the graph, identify the following values:

Bus A

Min	
Q1	
Median	
Q3	
Max	

Bus C

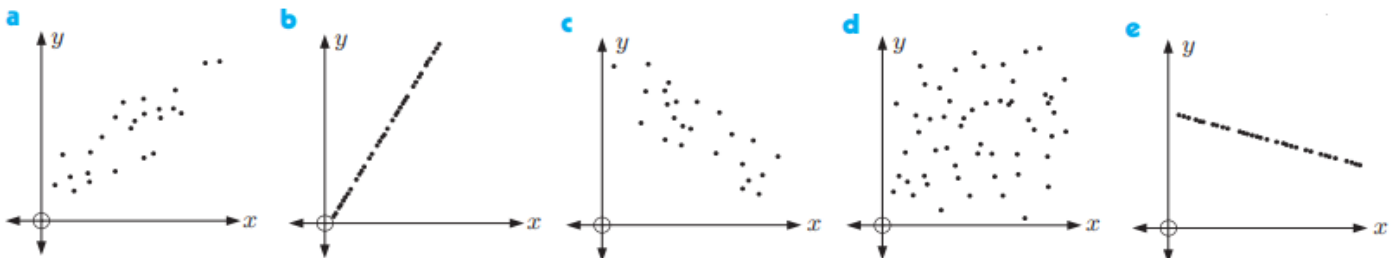|	
Min	
Q1	
Median	
Q3	
Max	

Two variable Analysis:

2. (a) Identify the direction of each correlation (positive, negative, no relation). Write the classification on each line.
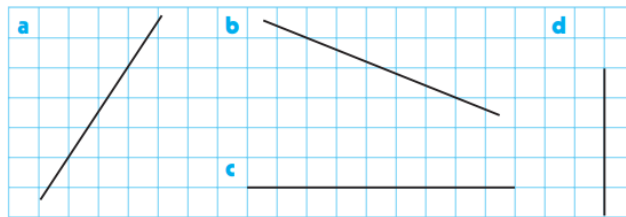
(b) Check your understanding of 2(a) on these lines – identify the direction of each correlation here too.
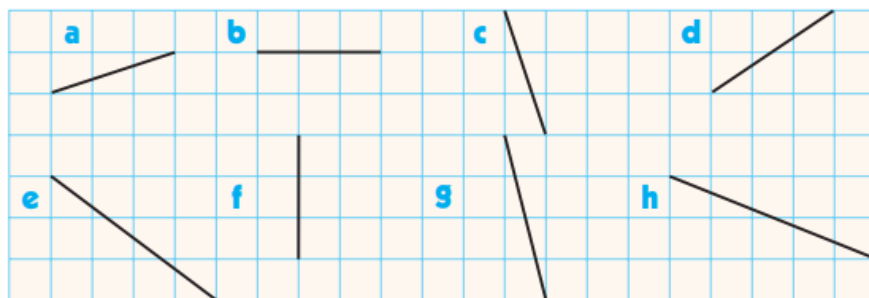
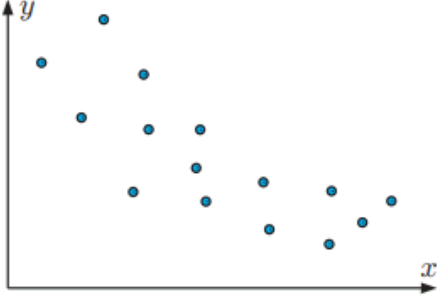3. Match the scatterplots with the values of r found below:

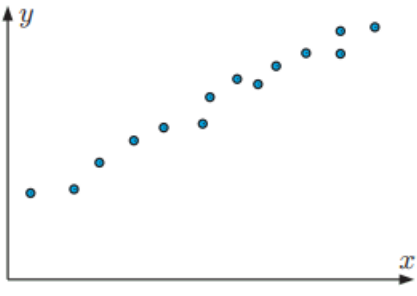. . . . . r = 1   . . . . . r = 0.6   . . . . . r = 0   . . . . . r = -0.7   . . . . . r = -1

4. Circle the correct descriptors for each graph:

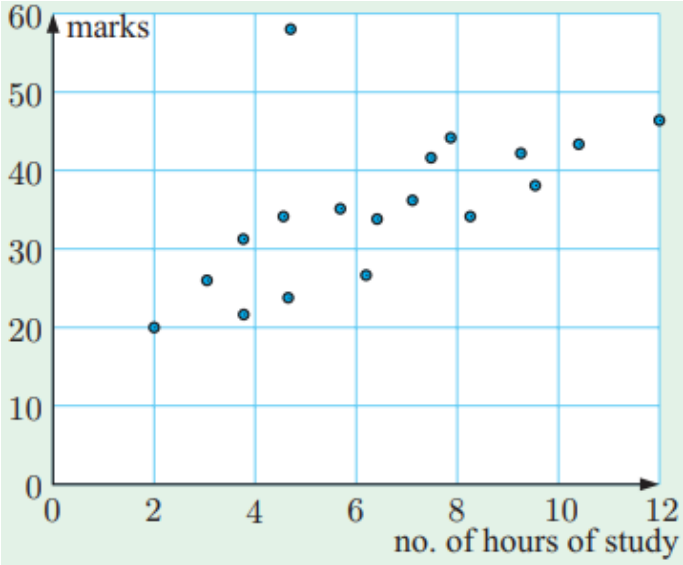**a**

Strength: Strong   Moderate   Weak   None

Direction: Positive   Negative   None

b

Strength: Strong   Moderate   Weak   None

Direction: Positive   Negative   None

5. For each graph, identify the pieces requested.

(a-g) This graph shows how many hours each student studied and their score on a test out of 60.

a) Identify the dependent variable	
b) Identify the independent variable	
c) Which variable is the result?	
d) Which variable causes the other?	
e) What is the relationship strength?	
f) What is the relationship direction?	
g) What is the research question?	

(h-k) This graph shows how far students live from their school and how long it takes for them to travel there.
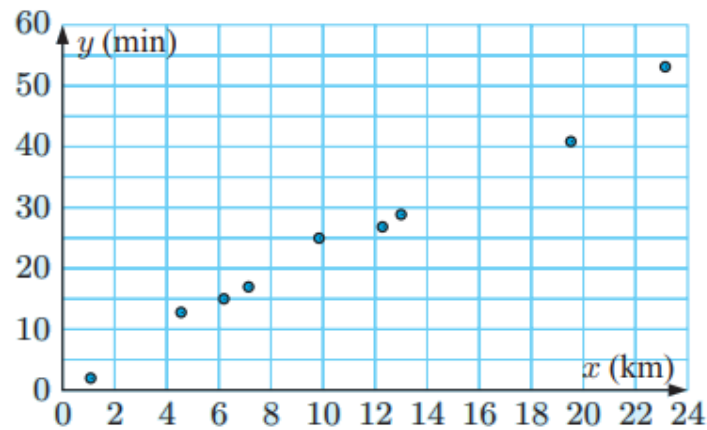
h) Identify the independent variable.	
i) Identify the dependent variable.	
j) What is the relationship strength?	
k) Time to get to school if you live 16 km away?	