

Solomon Practice Paper

Statistics S1 – G

Time allowed: 90 minutes

Centre: www.CasperYC.club

Name:

Teacher:

Question	Points	Score
1	7	
2	8	
3	9	
4	11	
5	11	
6	14	
7	15	
Total:	75	

How I can achieve better:

-
-
-



Last updated:

December 24, 2025



7. Pipes-R-us manufacture a special lightweight aluminium tubing. The price £ P , for each length, l metres, that the company sells is shown in the table.

l (metres)	0.5	0.8	1.0	1.5	2	4	6
P (£)	2.50	3.40	4.00	5.20	6.00	10.50	15.00

(a) Represent these data on a scatter diagram. [3]

You may use

$$\sum l = 15.8, \quad \sum P = 46.6, \quad \sum l^2 = 60.14, \quad \sum lP = 159.77$$

(b) Find the equation of the regression line of P on l in the form $P = a + bl$. [7]

(c) Give a practical interpretation of the constant b . [1]

In response to customer demand *Pipes-R-us* decide to start selling tubes cut to specific lengths. Initially the company decides to use the regression line found in part (b) as a pricing formula for this new service.

(d) Calculate the price that *Pipes-R-us* should charge for 5.2 metres of the tubing. [2]

(e) Suggest a reason why *Pipes-R-us* might not offer prices based on the regression line for any length of tubing. [2]

Total: 15

