Chapter 6 Web Task

Ciel's Cells Inc.

This task is best done using technology.

Ciel Pangnurtung opened the first cellular phone store in her hometown. Today, Ciel's Cells Inc. is a thriving business, and Ciel has hired co-op students from the local high school.



The table gives Ciel's sales (number of units sold) for each month she has been in business.

Ciel has asked her two co-op students, Sumita and Jason, to forecast sales for the next five months.

Month	Sales
1	5 820
3	6 011
	6 298
4	6 543
5	6 821
6	7 318
7	7 801
8	8 600
9	8 618
10	8 962
11	9 240
12	9 487
13	9 696
14	9 991
15	10 088
16	10 361
17	10 433
Current month	2 104
to date	

- a) Sumita used an exponential regression to forecast sales. Replicate Sumita's work to give sales forecasts for the next five months. Explain any assumptions you make. Is an exponential model a good choice for this data?
- b) Jason is worried about market demand. He thinks Ciel's sales may not continue to grow at the same rate as the past. Jason used a cubic regression to forecast sales. Replicate Jason's work to give sales forecasts for the next five months. Explain any assumptions you make. Is a cubic model a good choice for this data?
- c) Write a report to Ciel, recommending, with reasons, which set of sales forecasts she should use in building her business plan for the next five months.