

# Price Hike

You need: a calculator, a computer

**ACTIVITY**

5 years ago, the average monthly electricity bill from Extra Energy was \$90, and consumer groups thought that this was a fair charge.

1.
  - a. 3 years ago, the charges were increased, with the result that the average monthly bill became \$100.  
What percentage increase was this?
  - b. Extra Energy has now increased its charges by a further 20 percent.  
What is the average monthly bill now?
  
2. Inflation has been a steady 5 percent per year over the last 5 years.  
Complete the table so that you can compare Extra Energy's charges with what has happened to the value of the \$90 charged 5 years ago:

Number of years ago	5	4	3	2	1	0
Average monthly bill in \$	90	90	100	100	100	
\$90 adjusted for 5% annual inflation	90					

3. Enter the information from your table into a computer spreadsheet and create a time-series graph covering the last 5 years, showing:
  - a. the average monthly electricity bill;
  - b. what that bill would have been if it had risen each year in line with inflation.
  
4. The chief executive of Extra Energy, Martin Harris, is being interviewed about the latest price increase. Use information from your graph to write his speech, justifying the price increase to the public.
  
5. Consumer spokesperson, Anita Armstrong, is also being interviewed.  
How could she use the same data to show that the price increase is unfair?

