Company X is a manufacturing firm, specialising in widgets. With ten staff on the ‘shop floor’ and three more in upper management, they are a small firm looking to expand. Each widget costs $50 to make, and can be sold for $100.

5000 widgets can be made in a day, with orders ranging from 300 to 500 widgets. Using the ‘Company X’ spreadsheet, work out the following:

1. Expenditure - Company X’s greatest cost is the salary paid to its staff. If floor workers are paid $1000 a week before tax, and management are paid between $1500 and $2000 (specific amounts are already on the spreadsheet), work out the total paid to all employees weekly, both before and after tax.
2. The tax rate is due to increase from 12.5% to 15% at the start of the next financial year. (1 April 2023). Assuming all other costs remain the same, generate a new sheet that shows the decrease in wages due to tax.
3. However, this tax hike will also mean Company X can charge an additional 2.5% per widget. Make this adjustment on the new spreadsheet.
4. A disgruntled employee in the parent company, which is responsible for Company X’s IT needs, has implemented a virus that affected the payroll. As a result, all employees with an ‘x’ in their name had their last pay reduced by 25%. Adjust the spreadsheet to show
   1. The amount paid in that week, taking the deduction into account
   2. A correction for the following week - those employees will need to be paid an extra 25% to make up for the shortfall.
5. Company X is looking to make an annual profit of $3,000,000 before expanding. This involves opening a second branch, investing in more machines, and doubling the workforce. Taking into consideration ONLY the costs outlined above, show the weekly and annual profits made by Company X. If they cannot make the $3,000,000 goal, figure out the amount they would have to charge per widget in order to achieve this. (Management will take other costs into consideration, such as the purchase of a second site, new machinery, and additional staff. They already have the data for this.)