## Hine's Spreadsheets

You need: a computer spreadsheet

1. Hine's grandad gives her $\$ 50$ towards a new bicycle. Each week from then on, Hine saves $\$ 4$.

She makes a spreadsheet to record her savings. Note that the formulae showing in spreadsheets are normally hidden.
a. Explain what "week 0" in the spreadsheet means.
b. Show how the formula $=B 2+4$ calculates the value 54 for cell B3.
c. Work out the values that go in cells B4 to B14.

| $\square$ |  | Hine's Sauings (SS) |  |
| :---: | :---: | :---: | :---: |
|  | B3 | - $f x \times$ | = ${ }^{*} \mathrm{~A} 3+50$ |
|  | , | B | c |
| 1 | Week | Savings (\$) |  |
| 2 | 0 | = ${ }^{*}$ A $2+50$ |  |
| 3 | 1 | = ${ }^{*}$ A3 +50 |  |
| 4 | 2 | = $4^{*}$ A $4+50$ |  |
| 5 | 3 | = $4^{*}$ A $5+50$ |  |
| 6 | 4 | $=4^{*} A 6+50$ |  |
| 7 | 5 | $=4 * A 7+50$ |  |
| 8 | 6 | = ${ }^{*}$ A $8+50$ |  |
| 9 | 7 | $=4 * A 9+50$ |  |
| 10 | 8 |  |  |
| 11 | 9 |  |  |
| 12 | 10 |  |  |
| 13 | 11 |  |  |
| 14 | 12 |  |  |


2. Hine's grandad also makes a spreadsheet for Hine.
a. Make the spreadsheet. Work out the values for cells B2 to B14.
b. Show how the formula $=4^{*} \mathrm{~A} 3+50$ calculates the value 54. (The * means multiply.)
c. Check that Grandad's spreadsheet produces the same values in the savings column as Hine's.
3. Hine decides to continue saving regular weekly amounts instead of buying a bicycle.
She makes a second spreadsheet using her grandad's method.
a. Calculate the values that go in cells B2 to B9.
b. Make the spreadsheet and check your calculations.

c. Hine tells her grandad that his way of making spreadsheets is better than her first way. Why might she think this?
d. Calculate how much Hine can save after 1000 weeks.

