

# WORKSHEET

## Budget grid

The following spreadsheet has been set up as a weekly budget grid for a single father named James with two teenaged children, Lily and Harry. James earns a salary of \$105 000. This figure is entered into cell C4. Yearly expenses are entered into cells C10–C16 and monthly expenses are entered into cells C18–C31. Formulae in column D convert these into weekly expenses.

	A	B	C	D
1	<b>Weekly Budget Grid</b>			
2		per	Amount	Weekly
3	<b>INCOME</b>			
4	Wage/Salary	Year	\$105,000.00	\$2,019.23
5	Casual work		\$0.00	
6	Allowances/Pensions		\$0.00	
7			<b>Total Income</b>	<b>\$2,019.23</b>
8	<b>EXPENSES</b>			
9			Amount	Weekly
9	<b>Yearly</b>			
10	School expenses (fees, excursions)		\$1,700.00	\$32.69
11	Car maintenance		\$1,000.00	\$19.23
12	Roadside assistance		\$75.00	\$1.44
13	Car registration/licence		\$345.00	\$6.63
14	Car insurance/Green slip		\$1,378.00	\$26.50
15	Home insurance		\$1,009.00	\$19.40
16	Life insurance		\$88.00	\$1.69
17	<b>Monthly</b>			
18	Rent		\$0.00	\$0.00
19	Petrol		\$150.00	\$34.62
20	Medical		\$27.00	\$6.23
21	Mortgage (Home loan)		\$1,550.00	\$357.69
22	Car loan		\$500.00	\$115.38
23	Credit card payments		\$0.00	\$0.00
24	Phone		\$60.00	\$13.85
25	Mobile phone/Internet		\$112.00	\$25.85
26	Electricity		\$87.00	\$20.08
27	Water		\$60.00	\$13.85
28	Gas		\$65.00	\$15.00
29	Council rates		\$120.00	\$27.69
30	Health Fund		\$220.00	\$50.77
31	Gym/club/union membership		\$220.00	\$50.77
32	<b>Weekly</b>			
33	Groceries			\$350.00
34	Newspapers and magazines			\$15.00
35	Take-away and restaurant meals			\$100.00
36	Fares and travel			\$4.80
37	Entertainment (incl. videos)			\$50.00
38	Clothes/shoes			\$300.00
39	Sport/hobbies			\$55.00
40	Books/Music			\$15.00
41	Birthday gifts/donations			\$50.00
42	Home improvements/maintenance			\$80.00
43	Shopping/spending			\$50.00
44			<b>Total Expenses</b>	<b>\$1,909.17</b>
45	<b>Savings</b>			<b>\$110.07</b>

The formulae used in this spreadsheet are shown below:

	A	B	C	D
1	<b>Weekly Budget Grid</b>			
2		per	Amount	Weekly
3	<b>INCOME</b>			
4	Wage/Salary	Year	\$105,000.00	=C4/52
5	Casual work		\$0.00	
6	Allowances/Pensions		\$0.00	
7	<b>Total Income</b>			=SUM(D4:D6)
8	<b>EXPENSES</b>			
9	<b>Yearly</b>			
10	School expenses (fees, excursions)			=C10/52
11	Car maintenance			=C11/52
12	Roadside assistance			=C12/52
13	Car registration/licence			=C13/52
14	Car insurance/Green slip			=C14/52
15	Home insurance			=C15/52
16	Life insurance			=C16/52
17	<b>Monthly</b>			
18	Rent			=C18*12/52
19	Petrol			=C19*12/52
20	Medical			=C20*12/52
21	Mortgage (Home loan)			=C21*12/52
22	Car loan			=C22*12/52
23	Credit card payments			=C23*12/52
24	Phone			=C24*12/52
25	Mobile phone/Internet			=C25*12/52
26	Electricity			=C26*12/52
27	Water			=C27*12/52
28	Gas			=C28*12/52
29	Council rates			=C29*12/52
30	Health Fund			=C30*12/52
31	Gym/club/union membership			=C31*12/52
32	<b>Weekly</b>			
33	Groceries			\$350.00
34	Newspapers and magazines			\$15.00
35	Take-away and restaurant meals			\$100.00
36	Fares and travel			\$4.80
37	Entertainment (incl. videos)			\$50.00
38	Clothes/shoes			\$300.00
39	Sport/hobbies			\$55.00
40	Books/Music			\$15.00
41	Birthday gifts/donations			\$50.00
42	Home improvements/maintenance			\$80.00
43	Shopping/spending			\$50.00
44	<b>Total Expenses</b>			=SUM(D10:D43)
45	<b>Savings</b>			=D7-D44

Notice that there are no formulae entered into cells D5 and D6. This is because James only has one source of income. If James had another source of income, the formulae for these cells would have to be worked out according to whether the figure was given weekly, fortnightly, monthly or yearly.

You will also notice that yearly expenses have been divided by 52 to convert them to weekly expenses, while monthly expenses have been multiplied by 12 then divided by 52 (this is because there are not exactly 4 weeks in a month).

Total expenses are calculated in cell D45. Savings are calculated by subtracting the total expenses (cell D44) from the total income (cell D7). This allows James to experiment with different values to see how much money he can save.

## Questions

- 1 James decides to spend \$100 less per week on clothes, and he changes to a different health fund that costs \$180 per month. Modify the spreadsheet to show that James' Savings increase to \$219.30 each week.
- 2 James then receives a letter from his insurance company announcing an increase of \$50 in car insurance, life insurance and house insurance. Update the spreadsheet accordingly. How much is James saving per month now?
- 3 Harry goes to a different school, and his school fees increase by \$2000. Update the spreadsheet for James. What are the new weekly expenses for school fees?
- 4 Interest rates rise dramatically and James mortgage repayments increase by \$870. Modify the spreadsheet to show this change.
  - a What do you notice about James' weekly savings?
  - b What does this mean?
  - c Suggest 2 ways could adjust his expenses to manage this problem.
- 5 James takes on some casual work, earning an extra \$1250 per month. Add this into the spreadsheet in the Income section in cell C5. Put the word "Month" in cell B5. In cell D5 you will need to enter the following formula:  $=C5*12/52$ . This will convert his pay for his casual job into weekly income.
  - a What is James' new weekly income?
  - b How has this affected his weekly savings?

**Answers**

**2** \$216.41

**3** \$71.15

**4 a** They are negative.

**b** James is spending more than he is earning

**c** Reduce costs in some of the unfixed expenses such as birthday gifts, entertainment or take-away and restaurant food. Alternatively, James could get a second job to increase his income.

**5 a** \$2307.69

**b** It has increased them to \$265.64