GST

- **GST** stands for **G**oods and **S**ervices **T**ax.
- It is added to everything you purchase and it goes to the Government to fund the running of the country.
- The standard current GST rate on all products in New Zealand is 15%.
- Don't forget to add units and round when necessary.

Adding GST

Example:
The GST-exclusive price is $95. Calculate the GST-inclusive price.

Use the % button on your calculator

GST-inclusive amount = $95 x **1.15**   or   GST-inclusive amount = $95 + 15%
                                        = $109.25   = $109.25

Convert the percentage to a **decimal and add 1**.

Add GST to these prices.

1	$86	**2**	$15.50	**3**	$89.95
4	$102.32	**5**	$4056.99	**6**	$56.75
7	$0.23	**8**	$65.20	**9**	$530.00

10 The pre-GST price of a car is $3500.

   a Calculate its GST-inclusive price.

   b How much is the GST on the car?
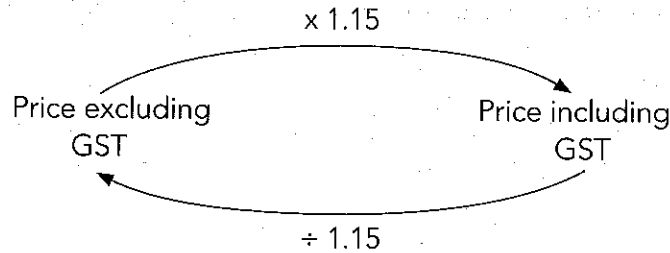
11 The pre-GST price of an ice-cream is $3.47.

   a Calculate its GST-inclusive price.

   b How much is the GST on the ice-cream?

Calculating the pre-GST price and GST

You may be given the GST-inclusive price and asked to calculate a pre-GST price or how much GST is being paid on an item.

$\times 1.15$

Price excluding GST   Price including GST

$\div 1.15$

Example: A painting costs $840 including GST. How much GST was paid?

GST-exclusive price = $840 ÷ 1.15
$$= \$730.43 \text{ (2 dp)}$$

This is the price without GST

∴ GST = $840 – $730.43
$$= \$109.57$$

Calculate GST-exclusive prices for the following.

1 $98

2 $27.45

3 $109.99

4 $256.78

5 $0.99

6 $980.65

7 $1.59

8 $86.70

9 $890.00

10   Derek bought a car for $4999. How much GST was included in this price?

11   How much GST did Amanda pay on her ice cream that cost her $3.45?

12   A car yard had a sale. It advertised that it would pay the GST on all cars sold. The salesman subtracted 15% from the full GST-inclusive price of $5999 in order to calculate the sale price. Explain why his boss was angry, and calculate what the sale price should have been.

Mixing it up

Answer the following questions.

1 Two ninths of the class of 27 caught the flu. How many students had the flu?

2 Calculate the GST-exclusive price of an item that is advertised at $1099.

3 An investment of $5750 earns $235.75 interest in a year. Calculate the annual interest rate.

4 An investment of $2500 earns 3.5% interest per year. How much will the investment be worth after one year?

5 Nic ran 2.6 km on Monday, 3.2 km on Wednesday, 2.9 km on Friday and 4.8 km on Sunday. Calculate the total distance that he ran over the week.

6 A dressing recipe contains four tablespoons of oil, one tablespoon of vinegar and one tablespoon of lemon juice. What percentage of the dressing is lemon juice?

7 A family of three and a family of four go out to dinner. The total bill is $287.35. Calculate how much the family of three should pay.

8 A bike shop has a sale in which 15% is taken off all prices. Calculate the sale price of a bike that is normally $399.

9 The dry ingredients for a muesli bar recipe are $2\frac{1}{2}$ cups of rolled oats, $\frac{3}{4}$ cup of raisins, $1\frac{3}{4}$ cups of nuts and $\frac{1}{2}$ cup of bran. How many cups of dry ingredients is this?

10 Jon got five sixths of the questions in his science test correct, he got 82% in his mathematics test, and 19 questions correct out of 23 in history. In which subject did he score the highest mark?

11 Pita ate a sixth of the pizza. Pania ate three tenths of what remained. Then Paula ate a quarter of the entire pizza. What fraction was left for Penny?

12 An old model of a tablet is advertised at $399, rather than the normal price of $469. By what percentage was the tablet reduced?

13 After a 5% increase in the cost of a litre of milk, the price is $2.73. What was the price before the increase?

14 The price of wine gums increased from 5c each to 6c. Calculate the percentage increase in price.

15 Uncle Scrooge revised his will yet again. The new one states that 35% goes to the cat. The remainder is to be shared equally between his five nieces, except for the youngest (his favourite), who gets an extra 5% of the estate. If his estate is worth $38 000, calculate how much the cat inherits, and how much each niece inherits. .