For every formula you build, **test it on a case you did not use to build it** and show the test.

1 There are 60 minutes in an hour.

(a) How many minutes in 2 hours? (1)

(b) How many minutes in 5 hours? (1)

(c) Write a formula for the number of minutes m in h hours (1)

(d) Test your formula on 4 hours (1)

(4 marks)

2 There are 24 hours in a day.

(a) How many hours in 3 days? (1)

(b) Write a formula for the number of hours h in d days (1)

(c) Use your formula to find the number of hours in 14 days (1)

(3 marks)

3 There are 100 centimetres in a metre.

(a) Write a formula for the number of centimetres c in m metres (1)

(b) Use your formula to convert 3.3 metres to centimetres (1)

(c) Use your formula to convert 0.45 metres to centimetres (1)

(3 marks)

4 Oranges cost 400 shillings each.

(a) Complete: 3 oranges cost _____ and 7 oranges cost _____ (2)

(b) Write a formula for the cost C of n oranges (1)

(c) Test your formula on 10 oranges (1)

(4 marks)

5 A tap fills a tank at 15 litres every minute.

(a) How many litres after 4 minutes? (1)

(b) How many litres after 10 minutes? (1)

(c) Write a formula for the number of litres L after t minutes (1)

(d) Test your formula on 7 minutes (1)

(4 marks)

6 A school buys textbooks at $22{,}000$ shillings each.

(a) Write a formula for the cost C of b textbooks (1)

(b) Use it to find the cost of 40 textbooks (1)

(c) Read your formula back as a sentence, without using any letters (2)

(4 marks)