Proportion

1   Twelve bars of chocolate cost £8.64. Calculate the cost of 17 bars of chocolate.

2   Ten workmen take four hours to dig a hole. How long would it take 8 workmen to dig a hole the same size if they work at the same rate?

3   Eight robots build 5 cars in one day. How long would it take ten robots to build five cars?

4   It takes 2.7kg wheat to brew three pints of beer. How many pints of beer can be brewed with 99kg of wheat?

5   6 litres of water are needed to make 7 litres of juice. How many litres of water are needed to make twenty-four and a half litres of juice?

6   The table below shows two items that are directly proportional. Copy and fill out the rest of the table.

A	7	14	21	28	35	42	49	56
B						30		

7   The table below shows two items that are directly proportional to each other. Copy out and complete the table.

A	9	15	18	24	30	39	42	48	54
B				56					

8   It takes 2 hours for five people to move some rubble. How long would it take for ten people to move four times as much rubble?

9   At a travel money exchange shop, £1.00 buys $1.48. How much money would it take to purchase the following number of dollars? (To the nearest penny)
   a. $148.00   c. $83.00   e. $79.00
   b. $900.00   d. $2800.00   f. $850.00

10   How much would it cost to purchase the following amounts if $1.36 purchased £1.00? (To the nearest cent)
   a. £80.00   c. £980.00   e. £5,904.87
   b. £750.00   d. £2,750.00   f. £683.93

11   Six music downloads cost £3.78. How much would ten music downloads cost?

12   A car does 350 miles on £65 worth of fuel. Assuming the same driving conditions, how many miles would the same car cover with £80 worth of fuel?

Answers

1   £12.24
2   5 hours
3   19 hours 12 minutes
4   110 pints of beer
5   21 litres of water
6

A	7	14	21	28	35	42	49	56
B	5	10	15	20	25	30	35	40

7

A	9	15	18	24	30	39	42	48	54
B	21	35	42	56	70	91	98	112	126

8   4 hours

9

    a. £100.00   c. £56.08   e. £53.38
    b. £698.11   d. £1,891.89   f. £574.32

10

    a. $108.80   c. $1,332.80   e. $8,030.62
    b. $1,020.00   d. $3,740.00   f. $930.14

11   £6.30

12   430.7692308 miles