

M7 = 33 days to go!

7 Sue bought 100 ml of suncream for £5.40 in Belfast.

While in Spain she bought 150 ml of suncream for 8.80 euro.

The exchange rate was £1 = 1.07 euro.

Was it better value in Belfast or in Spain?

Show your working.

Must make
the same
size of
suncream.

Belfast	Spain
100 ml is £5.40	
50 ml is £2.70	
150 ml is £8.10	150 ml is €8.80

We now need to compare the prices.

Change £8.10
into €

$$£8.10 \xrightarrow{\times 1.07} €8.67$$

Answer Belfast is better value.

11/2

Change €8.80
into £

$$€8.80 \xrightarrow{\div 1.07} £8.22$$

Answer Belfast is better value.

14 s is directly proportional to the square of v .

v^2

When $v = 20$, $s = 250$

Express s in terms of v .

$$s \propto v^2$$

Replace \propto with $= k$

$$s = k v^2$$

$$250 = k (20)^2$$

$$250 = k 400$$

$$\frac{250}{400} = k$$

$$\frac{5}{8} = k$$

Answer _____ [3]

Don't forget to finish.

$$s = \frac{5}{8} v^2$$