# National Numeracy Tests

## PROCEDURAL 9EP17

First name
Last name
School
Class
Date of birth O
Date of test 2017
Total score (maximum 36)







1 Write  $\frac{3}{4}$  as a decimal.





2



13 × 11 =



3



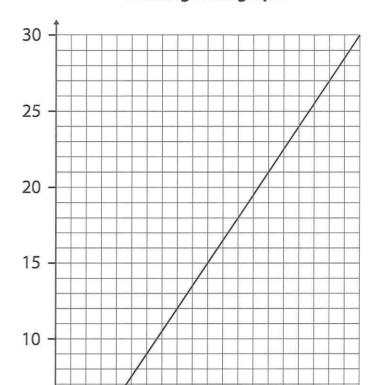
Or buy all three together for £3

How much **cheaper** is it to buy all three together than to buy them separately?

£ cheaper



## Exchange rate graph



Swiss francs

5



5

£25 = Swiss francs

10

Pounds (£)





Write 12 out of 60 as a percentage.

%

15

20





6 A map

A map uses a scale of 1 centimetre to 100 metres.

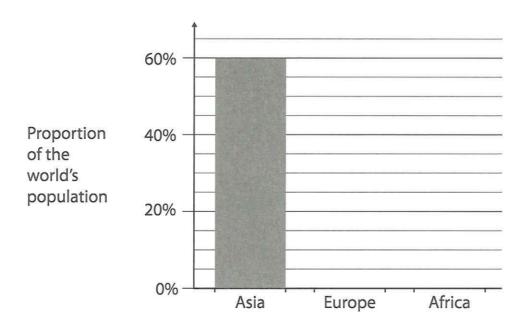
How many centimetres on the map represent a distance of 1 kilometre?

centimetres



7

### Bar chart to compare the populations of Asia, Europe and Africa



The ratio of populations of **Asia**: **Europe** is about 6:1

Draw the bar for Europe on the chart.



The ratio of populations of **Europe** : Africa is about 2:3

Draw the bar for Africa on the chart.

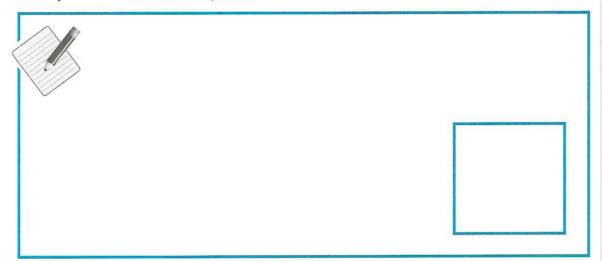


### Two-way table to show the number of Welsh speakers in an office

	Number of females	Number of males
Welsh speaker	34	26
Not a Welsh speaker	19	21

What fraction of these people are Welsh speakers?

Write your answer in its simplest form.

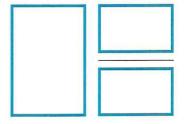


The cube root of 1000



Multiply  $\frac{2}{3}$  by 5

Write your answer as a mixed number.









### Rent a car

Small car £14.95 per day

Medium car £18.99 per day

Alun wants to rent a medium car for 5 days.

To the **nearest £**, how much would he save by renting a small car?

£



12

13

A scatter diagram shows that one variable **increases** as the other **decreases**.

What type of correlation is this?

correlation



Tariq buys 100 shares at 500p per share.

After one year he sells them all at 450p per share.

In total, how much money has Tariq lost?

£



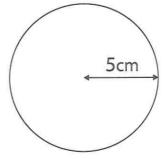
(15)

Write the missing number in this statement about a circle.

Diameter = × radius



Underline the calculation below that shows the **circumference** of this circle.



 $5 \times \pi$ 

 $10 \times \pi$ 

 $25 \times \pi$ 

 $100 \times \pi$ 



(16) Chile is a country in South America.

In Chile people use money called pesos.





In 1919 a plane flew across the Atlantic for the first time.

It flew 3040 kilometres in 16 hours.

What was its average speed?



kilometres per hour



(18) Cerys is an architect.

She uses the scale 1:50 when drawing plans.

A wall will be 6 metres long.

What length, in centimetres, should it be on the plan?

centimetres



Circle the number below that is equivalent to  $1000 \times 1000$ 

10<sup>9</sup>

108

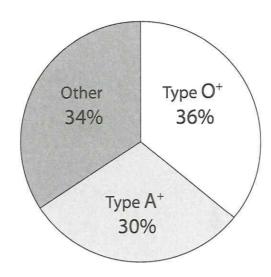
 $10^{7}$ 

 $10^{6}$ 

 $10^{5}$ 



The pie chart shows the most common blood types of donors in the UK.



In a random sample of 500 donors in the UK, how many would you expect to be type  $O^+$ ?

donors



1 stone = 14 pounds

7 stones = pounds



22) 30 is increased to 50

To the **nearest** 1%, what is the **percentage increase**?







Circle all the calculations below that have the same answer as 15% of 28

$$0.15 \div 28$$

$$15 \div 100 \times 28$$

$$0.15 \times 28$$

$$100 \div 15 \times 28$$

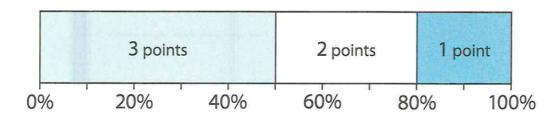


24

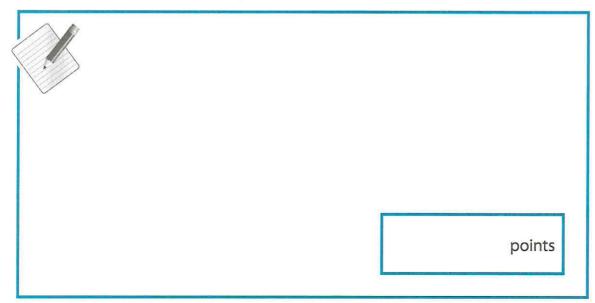
In a survey 100 people were asked how much they liked a new drink.

They gave a score of 3 points, 2 points or 1 point.

The percentage bar chart shows their responses.



Work out the **mean** number of points.





Manon sees this road sign in France.



She knows that it takes 60 minutes to drive to Loudéac.

At the same speed, how long would it take to drive to Rostrenen?

minutes



26

Temperature in 
$$^{\circ}C = \frac{\text{(Temperature in }^{\circ}F - 32)}{1.8}$$

The temperature in the clouds of Jupiter is about -238°F.

Work out this temperature in °C.

