

Monday 8th June

The Sumdog competition continues so before you tackle the questions and investigation below, login to <https://pages.sumdog.com/> using your Mymaths login and password and take part!

Fluent in five!

Remember to think first as to whether you need to use a written method (W), or a mental method (m).

Check your answers, and if you made any mistakes, see if you can work out what you did wrong.

$$A. 60 \times 3 =$$

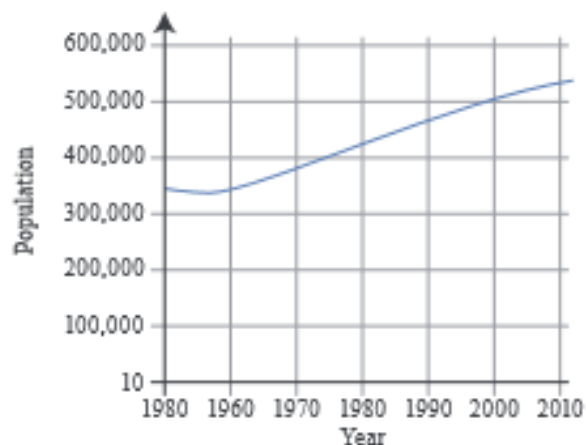
$$B. 17,456 - 4,737 =$$

$$C. 9 + 7 + 8 =$$

$$D. 7 \times ? = 0$$

$$E. 76,328 + 484,313 =$$

Q1 Look at this line graph. It shows the population of a town in Norfolk.



a In which year did the population reach 450,000 for the first time?

1 mark

b By how much did the population increase in the 40 years before the year 2000?

1 mark

Q2 Round 94,516

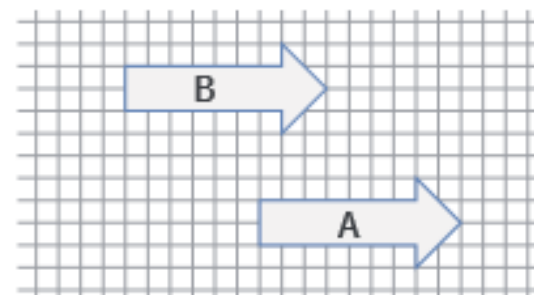
to the nearest 10:

to the nearest 100:

to the nearest 1,000:

2 marks

Q3 These two arrows are identical.



Complete the boxes to describe the translation of arrow A to arrow B.

The arrow has moved squares up and squares to the left.

1 mark

Investigation time






































Shape Times Shape



The coloured shapes stand for eleven of the numbers from 0 to 12.

Each shape is a different number.

Can you work out what they are?

 x  x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 
 x  = 	 x  = 



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HINT: Write out the numbers from 0 to 12 before you start and cross them off as you go.. Write any guesses above the coloured shapes.

Begin by working out the lilac square. A number, multiplied by itself, then multiplied by itself again, must equal no more than 12. Test out the possibilities.

Answers

$$A. 60 \times 3 = 180 \text{ (M)}$$

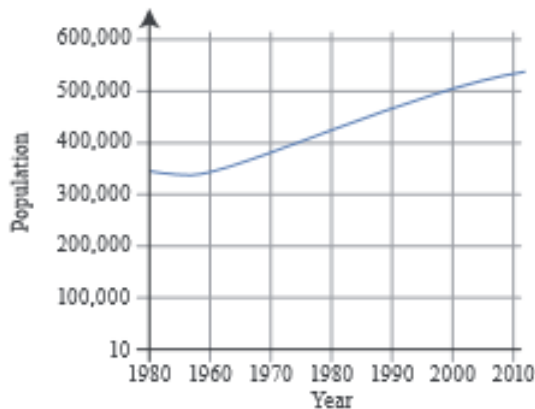
$$B. 17,456 - 4,737 = 12,719 \text{ (W)}$$

$$C. 9 + 7 + 8 = 24 \text{ (M)}$$

$$D. 7 \times 0 = 0 \text{ (M)}$$

$$E. 76,328 + 484,313 = 560,641 \text{ (W)}$$

Q1 Look at this line graph. It shows the population of a town in Norfolk.



a In which year did the population reach 450,000 for the first time?

1985

1 mark

b By how much did the population increase in the 40 years before the year 2000?

150,000

1 mark

Q2 Round 94,516

to the nearest 10:

94,520

to the nearest 100:

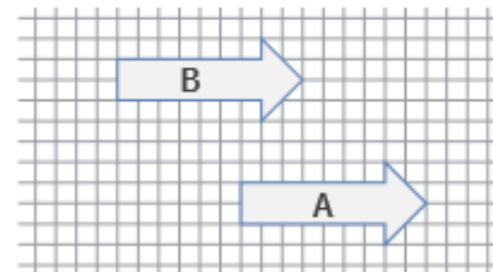
94,500

to the nearest 1,000:

95,000

2 marks

Q3 These two arrows are identical.



Complete the boxes to describe the translation of arrow A to arrow B.

The arrow has moved **6** squares

up and **6** squares to the left.

1 mark

$$\boxed{2} \times \boxed{2} \times \boxed{2} = \text{8}$$

$$\boxed{3} \times \boxed{3} = \text{9}$$

$$\boxed{2} \times \text{4} = \text{8}$$

$$\boxed{2} \times \text{5} = \text{10}$$

$$\boxed{3} \times \text{4} = \text{12}$$

$$\boxed{3} \times \text{1} = \text{3}$$

$$\boxed{3} \times \boxed{2} = \text{6}$$

$$\text{1} \times \text{10} = \text{10}$$

$$\text{6} \times \boxed{2} = \text{12}$$

$$\boxed{2} \times \text{0} = \text{0}$$

$$\boxed{2} \times \boxed{2} = \text{4}$$

$$\text{0} \times \text{8} = \text{0}$$