

Tuesday 9<sup>th</sup> 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.

$$A. 6.94 \times 10 =$$

$$B. 374 \times 7 =$$

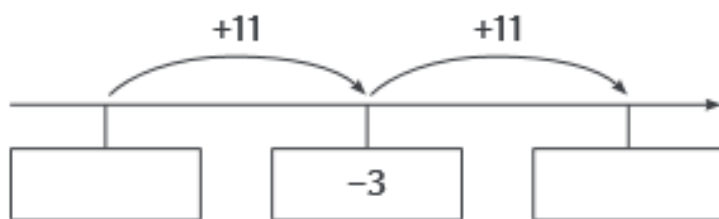
$$C. 765 + 700 =$$

$$D. 4 + 9 + 1 =$$

$$E. 432 \div 7 =$$

**Q1** Here is part of a number line.

Write the missing numbers in the boxes.



2 marks

**Q2** Ali puts these five numbers on a number line.

567,843 453,999 1,033,321 940,999 587,743

**a** Which number would be closest to 500,000?

1 mark

**b** Which number would be closest to one million?

**Q3** Circle the fractions below that are not equivalent to  $\frac{6}{7}$ .

$\frac{18}{21}$     $\frac{22}{28}$     $\frac{60}{70}$     $\frac{42}{35}$     $\frac{7}{14}$     $\frac{72}{84}$

2 marks

Investigation time! Consecutive numbers are next to each other when you count. Eg 2 and 3, 3 and 4, 10 and 11, 19 and 20. Use this to help you in the investigation below. Remember "sum" means add.

## 10 Consecutive numbers

The number 15 can be expressed as the sum of two consecutive numbers.  
In fact  $15 = 7 + 8$ .

1. Write the following numbers as sums of two consecutive numbers:

$$11 = \underline{\quad} + \underline{\quad} \quad 21 = \underline{\quad} + \underline{\quad} \quad 17 = \underline{\quad} + \underline{\quad}$$

$$25 = \underline{\quad} + \underline{\quad} \quad 13 = \underline{\quad} + \underline{\quad} \quad 31 = \underline{\quad} + \underline{\quad}$$

2. Write the following numbers as sums of three consecutive numbers:

$$15 = \underline{\quad} + \underline{\quad} + \underline{\quad} \quad 12 = \underline{\quad} + \underline{\quad} + \underline{\quad} \quad 21 = \underline{\quad} + \underline{\quad} + \underline{\quad}$$

$$27 = \underline{\quad} + \underline{\quad} + \underline{\quad} \quad 24 = \underline{\quad} + \underline{\quad} + \underline{\quad} \quad 33 = \underline{\quad} + \underline{\quad} + \underline{\quad}$$

3. Write each the following numbers as the sum of two or more consecutive numbers, where possible. In some cases there may be more than one answer.

10   18   22   16   20   26   28   30   36   45

Answers

$$\text{A. } 6.94 \times 10 = 69.4 \text{ (M)}$$

$$\text{B. } 374 \times 7 = 2,618 \text{ (W)}$$

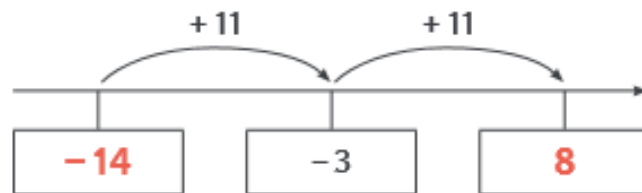
$$\text{C. } 765 + 700 = 1,465 \text{ (M)}$$

$$\text{D. } 4 + 9 + 1 = 14 \text{ (M)}$$

$$\text{E. } 432 \div 7 = 61 \text{ r } 5 \text{ or } 61 \frac{5}{7} \text{ (W)}$$

**Q1** Here is part of a number line.

Write the missing numbers in the boxes.



2 marks

**Q2** Ali puts these five numbers on a number line.

567,843 453,999 1,033,321 940,999 587,743

a

Which number would be closest to 500,000?

**453,999**

1 mark

b

Which number would be closest to one million?

**1,033,321**

**Q3** Circle the fractions below that are not equivalent to  $\frac{6}{7}$ .

$\frac{18}{21}$   $\frac{22}{28}$   $\frac{60}{70}$   $\frac{42}{35}$   $\frac{7}{14}$   $\frac{72}{84}$

2 marks

## 10 Consecutive numbers

The number 15 can be expressed as the sum of two consecutive numbers.  
In fact  $15 = 7 + 8$ .

1. Write the following numbers as sums of two consecutive numbers:

$$11 = \underline{5} + \underline{6} \quad 21 = \underline{10} + \underline{11} \quad 17 = \underline{8} + \underline{9}$$

$$25 = \underline{12} + \underline{13} \quad 13 = \underline{6} + \underline{7} \quad 31 = \underline{15} + \underline{16}$$

2. Write the following numbers as sums of three consecutive numbers:

$$15 = \underline{4} + \underline{5} + \underline{6} \quad 12 = \underline{3} + \underline{4} + \underline{5} \quad 21 = \underline{6} + \underline{7} + \underline{8}$$

$$27 = \underline{8} + \underline{9} + \underline{10} \quad 24 = \underline{7} + \underline{8} + \underline{9} \quad 33 = \underline{10} + \underline{11} + \underline{12}$$

3. Write each the following numbers as the sum of two or more consecutive numbers, where possible. In some cases there may be more than one answer.

10   18   22   16   20   26   28   30   36   45