



Section 1

Perform these calculations with Roman numerals without converting to numbers. Give the answers as a Roman numeral.

CCIX + CLXXVI =

CLXV - XCVI =

Section 2

Write all the square numbers from 1×1 to 12×12 .

What happens when you add consecutive square numbers?

Section 3

Calculate:

$$\begin{array}{r} 6_3 \\ \times 2_ \\ \hline 17\ 444 \\ \hline 210 \\ \hline _4\overline{)29_0} \end{array}$$

Section 4

Calculate:

$\frac{1}{4} + \frac{5}{16} =$

$\frac{5}{6} - \frac{7}{12} =$

Section 5

Write the following fractions as percentages:

$\frac{9}{20}$

$\frac{11}{25}$

$\frac{27}{50}$

Section 6

A bottle of energy drink contains 380ml drink. Packs contain six bottles. A box must not contain more than 10l of drink. What is the most number of packs that a box can contain?

Section 8

Lane swimming 1	07:00
Parent and toddler	10:00
Lane swimming 2	11:30
Adult lessons	12:45
Lane swimming 3	14:15
Leisure swim	15:45
Child lessons	17:00
Leisure swim	18:30
Lane swimming 4	20:00
Pool closes	21:30

Here is a swimming pool timetable.

A swimmer swims all the lane swimming lessons in a day and swims 870 lengths. On average, how long does each length take?

The pool is open for the same time each day, in length of time, for how many days (to the nearest day) is the pool open each week?

Section 7

Explain why a triangle cannot have 2 obtuse angles.