# What is the next number in the sequence below? 

16
25
36

Place the numbers 1-12 in the twelve circles below so the sum of each side of the triangle is 36 . I will give you a head start by placing some of the numbers for you. (The numbers may be used once only.)


Can you determine the missing number in the box? The same rule of logic applies to all three boxes.

| 4 |
| ---: |
| 8 |
| 16 |
| 32 |


| 5 |
| ---: |
| 10 |
| 20 |
| 40 |


| 6 |
| :---: |
| 12 |
| $?$ |
| 48 |

Which of the values below is the same as 7 ?
a. $(6 \times 5) \div 2$
b. $(3+4) \div 5$
c. $(10-4)+\frac{1}{1}$
d. $(12-5)+2$

What number or numbers comes next in this series?
$\begin{array}{llllll}1 & 22 & 333 & 4444 & 55555 & 666666\end{array}$

In this arithmetic puzzle you have to fill in the question marks in the equations with numbers or one of the three operation symbols:
,,$+- \times$. (This puzzle has no division.)

| 4 | x | 3 | - | 9 | + | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| + |  | + |  | + |  | + |
| 8 | x | 9 | + | 3 | - | ? |
| + |  | $x$ |  | + |  | - |
| 9 | x | 4 | + | 4 | ? | 1 |
| $\times$ |  | $?$ |  | $\times$ |  | + |
| 3 | + | 8 | - | ? | ? | 9 |
| 39 |  | 31 |  | 20 |  | 20 |

