



Number Patterns and Sequences (1)



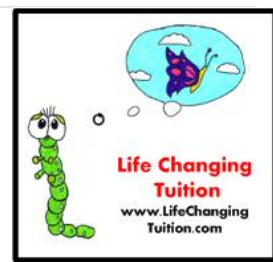
List the first 10 Prime Numbers



List the first 10 Square Numbers



List the first 5 Cube Numbers



List the first 5 Triangular Numbers





Number Patterns and Sequences (2)



1) Find the missing number in the following number sequences

3, 6, 9, ..., 15
, 42

5, 50, 500,, 50 000

7,, 21, 28,

$\frac{1}{2}$, 1,, 2, $2\frac{1}{2}$

50,, 30, 20, 10

1, 4, 9,

21.2, 21.5, 21.8,, 22.4
 0.32,, 0.0032

4, 8, 16,, 64,

32, 3.2,

$96\frac{1}{3}$, $96\frac{2}{3}$, 97, $97\frac{1}{3}$,,
 17.2,

5.2, 6.9, 8.6,

19.3, 18.6,,

2) Max read a book. On the first day he read up to page 6. On the second day he read up to page 12. On the third day he read up to page 18.

Explain the rule for this sequence?

What page will he be up to on the fourth day?

How many pages will he have read up to on the eleventh day?

3) Imagine you made the following sequence of patterns using matches. Draw the next three patterns.



Fill out the table below to show how

many matches you would need for each diagram number

Diagram Number	1	2	3	4	5	6	10	25
Matchsticks	3	6						

Write the rule for this pattern:

What formula could you use for this pattern?

