

Number Patterns

Exercise 1

Copy these sequences into your jotter and write down the next 2 numbers

- 1** 1, 2, 3, 4,,
- 2** 2, 4, 6, 8,,
- 3** 3, 5, 7, 9,,
- 4** 1, 4, 7, 10,,
- 5** 5, 8, 11, 14,,
- 6** 7, 11, 15, 19,,
- 7** 23, 22, 21, 20,,
- 8** 19, 17, 15, 13,,
- 9** 41, 43, 45, 47,,
- 10** 32, 34, 36, 38,,
- 11** 16, 19, 22, 25,,
- 12** 17, 20, 23, 26,,
- 13** 39, 36, 33, 30,,
- 14** 51, 48, 45, 42,,
- 15** 21, 25, 29, 33,,
- 16** 52, 56, 60, 64,,
- 17** 4, 5, 6, 7,,
- 18** 9, 10, 11, 12,,
- 19** 4, 6, 8, 10,,
- 20** 6, 9, 12, 15,,
- 21** 10, 15, 20, 25,,
- 22** 5, 7, 9, 11,,
- 23** 8, 11, 14, 17,,
- 24** 21, 19, 17, 15,,
- 25** 36, 30, 24, 18,,
- 26** 10, 13, 16, 19,,
- 27** 23, 19, 15, 11,,

Exercise 2

Copy these sequences into your jotter and write down the next 2 numbers

- 1** 19, 26, 33, 40, 47,,
- 2** 73, 62, 51, 40, 29,,
- 3** 19, 30, 41, 52, 63,,
- 4** 49, 41, 33, 25, 17,,
- 5** $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$,,
- 6** 8, $7\frac{1}{2}$, 7, $6\frac{1}{2}$, 6,,
- 7** 0.2, 0.9, 1.6, 2.3, 3.0,,
- 8** 7.6, 6.5, 5.4, 4.3, 3.2,,
- 9** 13, 26, 39, 52, 65,,
- 10** 95, 80, 65, 50, 35,,
- 11** $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$,,
- 12** $\frac{1}{2}$, 2, $3\frac{1}{2}$, 5, $6\frac{1}{2}$,,
- 13** 1, 3, 6, 10, 15,,
- 14** 1, 4, 9, 16, 25,,
- 15** 2, 4, 8, 14, 22,,
- 16** 1, 4, 10, 19, 31,,

17 4, 7, 12, 19, 28,,

18 0, 5, 15, 30, 50,,

19 0, 4, 12, 24, 40,,

20 22, 17, 13, 10, 8,,

21 41, 30, 21, 14, 9,,

22 18, 25, 31, 36, 40,,

23 1, 2, 4, 8, 16,,

24 1, 3, 9, 27, 81,,

25 3, 6, 12, 24, 48,,

26 320, 160, 80, 40, 20,,

Exercise 3

For each question:

- a Copy and complete the table
- b Write down the **rule** for the table

1

A	1	2	3	4	5	6		12
B	3	5	7					

2

C	1	2	3	4	5	6		10
D	2	5	8					

3

E	1	2	3	4	5	6		11
F	4	7	10					

4

G	1	2	3	4	5	6		20
H	3	7	11					

5

I	1	2	3	4	5	6		12
J	5	7	9					

6

K	1	2	3	4	5	6		10
L	2	6	10					

7

M	1	2	3	4	5	6		9
N	1	4	7					

8

P	1	2	3	4	5	6		12
Q	7	11	15					

9

R	1	2	3	4	5	6		20
S	4	9	14					

10

T	1	2	3	4	5	6		11
V	0	3	6					

11

W	1	2	3	4	5	6		13
X	8	11	14					

12

Y	1	2	3	4	5	6		10
Z	8	13	18					

Exercise 4

For each question:

- Copy and complete the table
- Write down the **formula** which works for the table

1

A	1	2	3	4	5	6		30
B	5	8	11					

2

C	1	2	3	4	5	6		25
D	6	8	10					

3

E	1	2	3	4	5	6		50
F	1	3	5					

4

G	1	2	3	4	5	6		100
H	1	4	7					

5

J	1	2	3	4	5	6		60
K	4	7	10					

6

L	1	2	3	4	5	6		25
M	5	9	13					

7

N	1	2	3	4	5	6		30
P	4	9	14					

8

Q	1	2	3	4	5	6		40
R	1	5	9					

9

S	1	2	3	4	5	6		35
T	7	9	11					

10

U	1	2	3	4	5	6		40
V	7	12	17					

11

W	1	2	3	4	5	6		15
X	7	11	15					

12

Y	1	2	3	4	5	6		50
Z	6	12	18					