Special Sequences

1) What is the term to term rule for each sequence, below?

a) 1, 4, 16, 64, 256

b) 6, 12, 24, 48, 96

c) 80, 40, 20, 10, 5

d) 48, 12, 3, 0.75, 0.1875

2) a) What is the special name for this sequence?

1, 4, 9, 16, 25

b) What would be the 10th term of the sequence?

c) What is the *n*th term of the sequence?

3) By comparing the following sequences with the sequence of square numbers, find the *n*th term for each one.

a) 4, 7, 12, 19, 28

b) -1, 2, 7, 14, 23

c) 3, 12, 27, 48, 75

4) a) What is the special name for this sequence?

1, 3, 6, 10, 15

b) What would be the 8th term of the sequence?

c) What is the *n*th term of the sequence?

d) Use the *n*th term to work out the 21st term of the sequence.