

Name: _____

Date: 2/19/2010

For each of the following patterns please write the recursive and explicit formula

1) 28, 33, 38, 43, 48 (Natasha Borrero)

2) 4.8, 12, 19.2, 26.4, 33.6 (Melanie Ochoa)

3) 2, 10, 50, 250, 1250 (Nitaesha Humphrey)

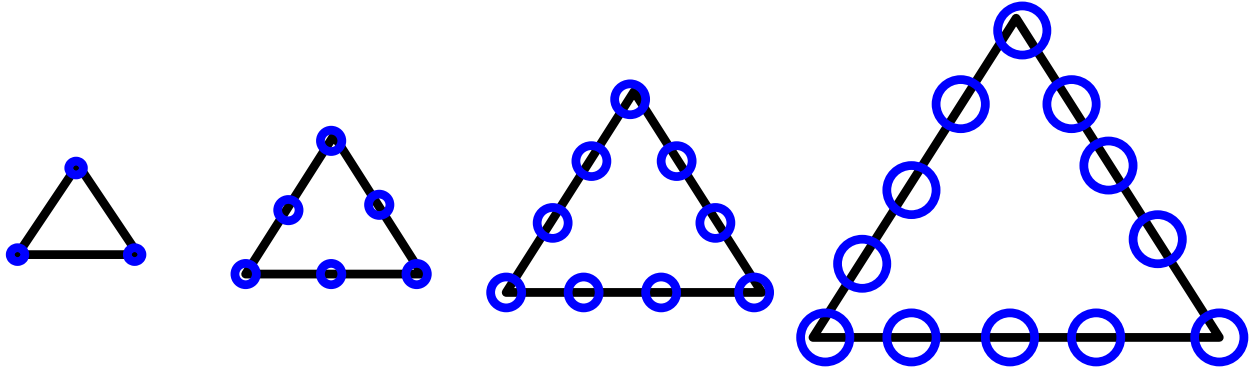
4) 5, 10, 20, 40, 80

A Developer has come to you about a new hotel he wants to build. He wants it to be the largest hotel in the world and also the tallest pyramid in the world. To do this he has to beat the records of the following two buildings.

Largest Hotel in the World - First World Hotel Malaysia 6,118 rooms

Tallest Pyramid in the World - Transamerica Pyramid San Francisco 48 Floors - 850ft tall

The design of the buildings top few floors look like this...



Note: Circles are the rooms

a) Fill in the following table –

Floor	Number of Rooms
1 st Floor (Top Floor)	
2 nd Floor	
3 rd Floor	
4 th Floor	
5 th Floor	

b) What type of sequence is this pattern?

c) Write the recursive formula for this pattern?

d) Write the explicit formula for this pattern?

e) How many floors do you need to make to have it meet the developer's request?