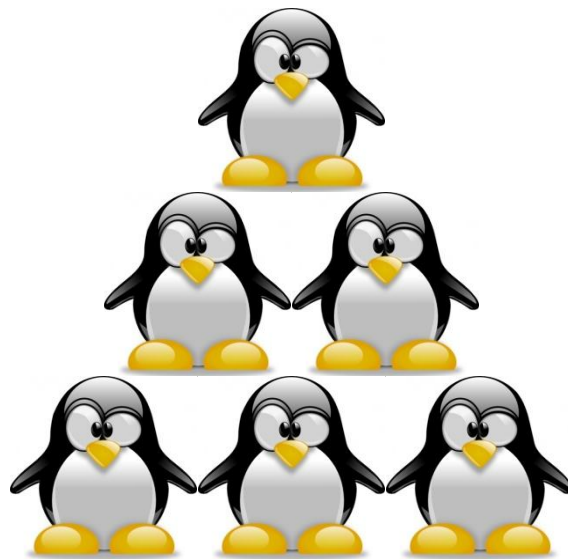


Problem Penguins!

In the book 365 Penguins, the Dad organises the 60 penguins into 4 triangular formations (pyramids). Another penguin has just turned up at the door, making the number of penguins now 61!

This is far too many penguins to be roaming around the house so Dad begins to arrange the penguins into pyramid. He starts by putting 1 penguin in the first row, 2 in the second and 3 in the third....

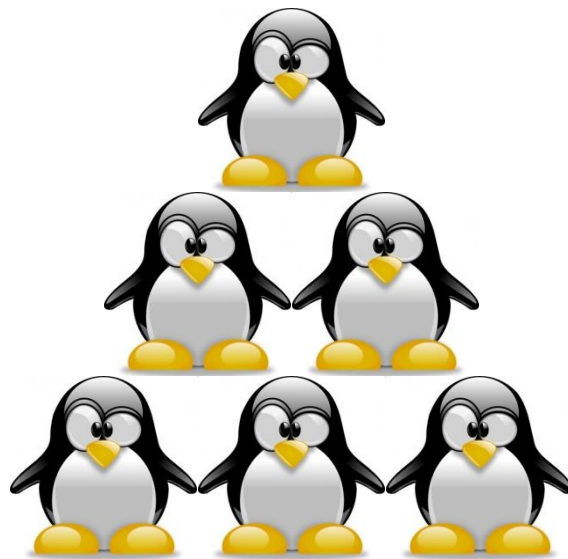


- If Dad continued to organise the penguins into a pyramid following this pattern how many penguins would be in the pyramid by the time he made the 10th row? Think logically!
- Can all 61 penguins be made into a perfect pyramid?
-if not, how many more penguins would Dad need to make a perfect pyramid (with all rows complete)?

Problem Penguins!

In the book 365 Penguins, the Dad organises the 60 penguins into 4 triangular formations (pyramids). Another penguin has just turned up at the door, making the number of penguins now 61!

This is far too many penguins to be roaming around the house so Dad begins to arrange the penguins into pyramid. He starts by putting 1 penguin in the first row, 2 in the second and 3 in the third....



- If Dad continued to organise the penguins into a pyramid following this pattern how many penguins would be in the pyramid by the time he made the 10th row? Think logically!
- Can all 61 penguins be made into a perfect pyramid?
-if not, how many more penguins would Dad need to make a perfect pyramid (with all rows complete)?