1. What’s the first question that comes to your mind?

2. Predict.

How many coins are there?

Give an answer you know is too high.

Give an answer you know is too low.

3. **What information will you need to know to solve the problem?**

4. Calculate.

 How many pennies are in the pyramid?

**Sequel**

6. I have $1,000,000.00 in pennies, how big of a pyramid can I make?

7. Each stack has 13 pennies which is a strange number to choose. Why do you think Marcelo Bezos chose it? [Hint: not out of an abundance of superstition.]

8. Bezos says he can tell you the number of pennies in a pyramid with this equation:



where s is the number of pennies in a stack and b is the number of pennies on one side of the square base of the pyramid. Does this work? If so, prove it.

9. [The Wheat and the Chessboard problem](http://en.wikipedia.org/wiki/Wheat_and_chessboard_problem).

10. Give groups of students a dollar in pennies. See how fast they can assemble seven stacks of thirteen pennies. Then ask them to use that as a sample to determine how long it would take them to build the entire pyramid.

11. If Bezos now wanted to add more levels to the pyramid, what's the best way for him to do that?

12. How heavy is the pyramid?