



Problem of the Week

Problem B

The Apartments are Multiplying

Alisa's apartment building has 12 floors, with 6 apartments on each floor. We have the following information about three other apartment buildings.

- Compared to Alisa's building, Bettina's apartment building has the same number of floors, but three times as many apartments on each floor.
- Compared to Bettina's building, Colin's apartment building has twice as many floors, but half as many apartments on each floor.
- Compared to Colin's building, Dara's apartment building has twice as many floors, and three times as many apartments on each floor.

Use this information to complete the following table. How does the total number of apartments change from one row to the next?

Building Owner	Number of Floors	Number of Apartments per Floor	Total Number of Apartments
Alisa	12	6	
Bettina			
Colin			
Dara			



EXTENSION: Ferid's apartment building has 20 apartments in total. Compared to Ferid's building, Gauri's apartment building has five times as many floors, but the same number of apartments per floor. How many apartments in total does Gauri's building have?