Handout: Approach 1 – Perimeter + 4

The Pool Border Problem

How many square tiles does it take to build a border around a square "pool"? Find a way to know the number of tiles it will take without having to count, for any size pool.
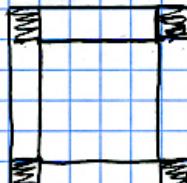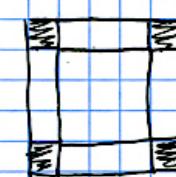
$2 \times 4 + 4 =$

＊ P + 4 = # tiles   Formula

＊ 1 side × 4 + 4 = # of tiles   Formula ＊ 4l + 4 =

4 × 4 pool
　　4 × 4 = 16 + 4 = 20 tiles

2 × 2 pool
　　2 × 4 + 4 = 12 tiles

3 × 3 pool
　　3 × 4 + 4 = 16 tiles

10 × 10 pool
　　10 × 4 + 4 = 44 tiles
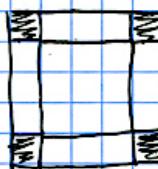
＊ Explaining
　　- Interesting that area was looked at.
　　- Not helpful - square root - too much to solve.
　　- Could solve but didn't know why or how.