

1. Since the sides of two quilts would add up together to make up one side of the quilt, you must find all of the possible sums for each number using other numbers in the collection. (See fig. 1)

Possible sums for

18 = 4 + 14, 10 + 8, 1 + 7 + 10, 9 + 8 + 1

15 = 7 + 8, 1 + 4 + 10, 14 + 1

14 = 10 + 4, 1 + 9 + 4

10 = 9 + 1

9 = 8 + 1

8 = 7 + 1

7 = n/a

4 = n/a

1 = n/a

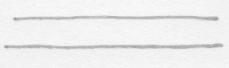
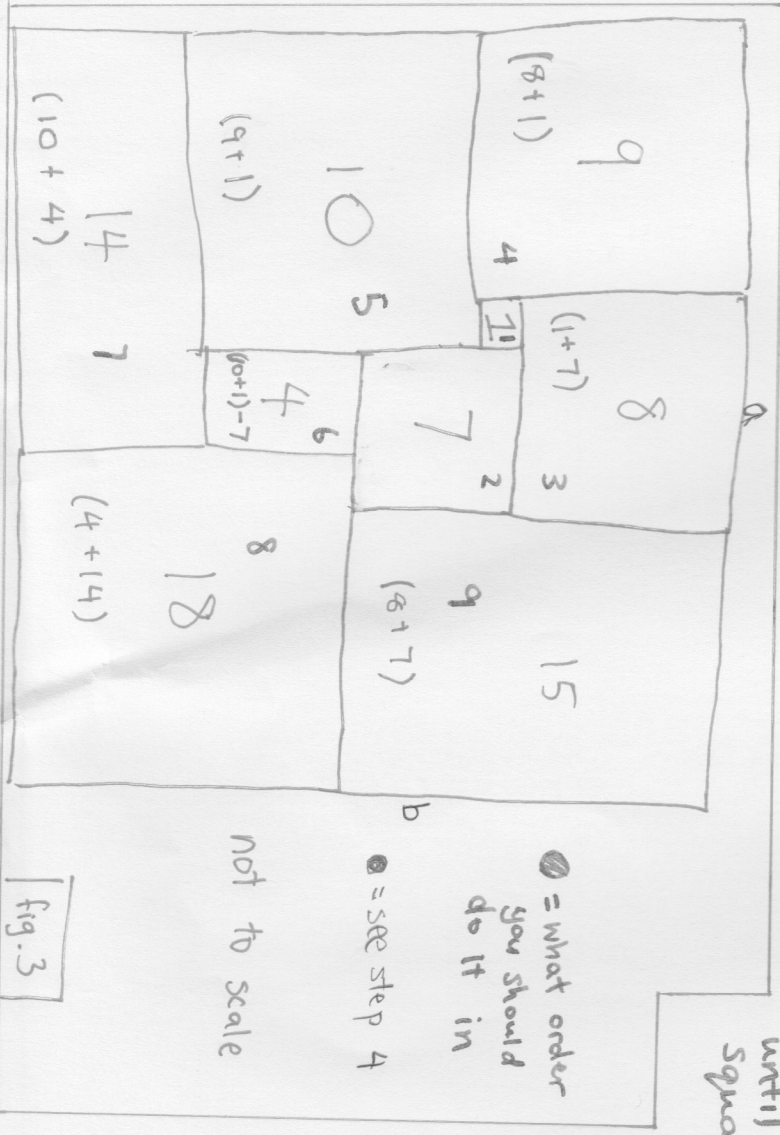
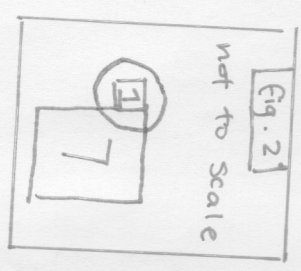


fig. 1

2. After I came up with all the possible sums for each number, I concluded that I should have 7, 8, and 9 in the middle. (See fig. 2)

8 + 1 + 7 = 8. So I would put 8 on top of the 1 and 7. I continued doing so until I used up all of the squares. (See fig. 3)



4. Therefore, after the quilt was finished, I worked out the area by doing $a \times b$, (see figure 3) which, in this case, is $(9+8+15) \times (15+18) = 32 \times 33 = 1056 \text{ cm}^2$

by Naomi Lau