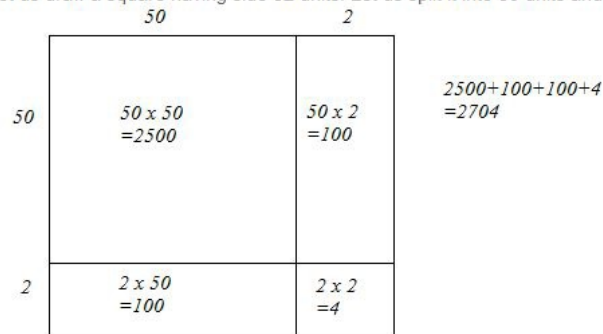Squares and Square Roots Ex 3.3 Q7

Answer :

(i) We have:

52 = 50 + 2

Let us draw a square having side 52 units. Let us split it into 50 units and 2 units.

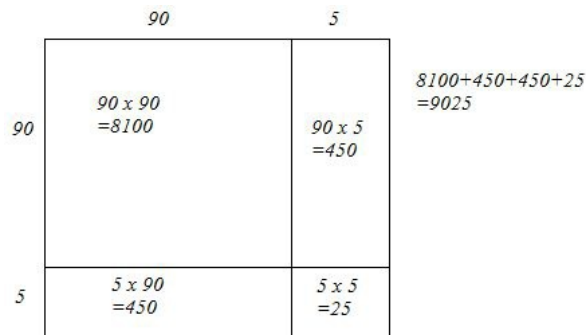|	50	2
50	50 x 50 =2500	50 x 2 =100
2	2 x 50 =100	2 x 2 =4

2500+100+100+4 =2704

The sum of the areas of these four parts is the square of 52. Thus, the square of 52 is 2704.

(ii) We have:

95 = 90 + 5

Let us draw a square having side 95 units. Let us split it into 90 units and 5 units.

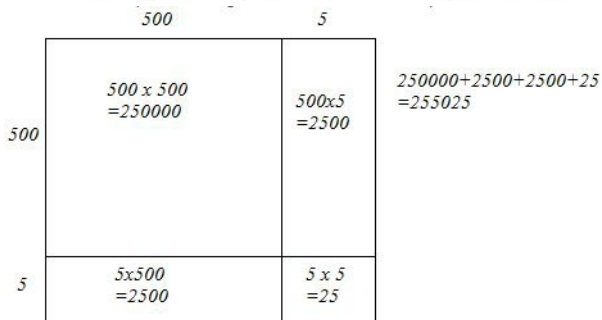|	90	5
90	90 x 90 =8100	90 x 5 =450
5	5 x 90 =450	5 x 5 =25

8100+450+450+25 =9025

The sum of the areas of these four parts is the square of 95. Thus, the square of 95 is 9025.

(iii) We have:

505 = 500 + 5

Let us draw a square having side 505 units. Let us split it into 500 units and 5 units.

	500	5
500	500 x 500 =250000	500x5 =2500
5	5x500 =2500	5 x 5 =25

250000+2500+2500+25 =255025
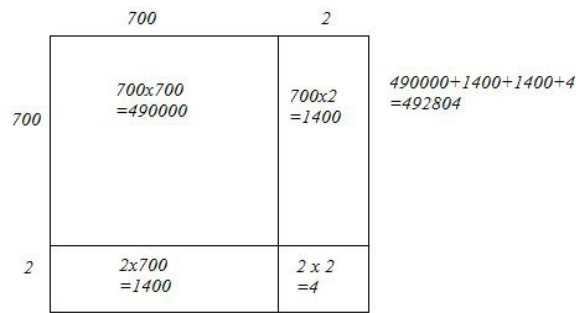
The sum of the areas of these four parts is the square of 505. Thus, the square of 505 is 255025.

(iv) We have:

702 = 700 + 2

Let us draw a square having side 702 units. Let us split it into 700 units and 2 units.

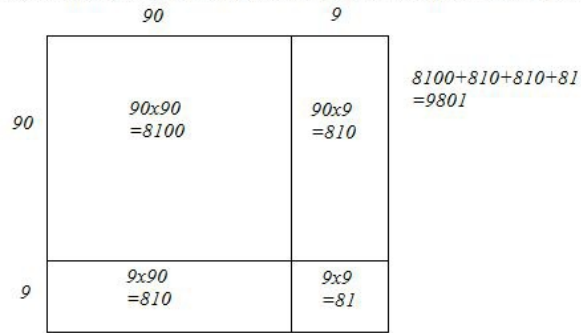|	700	2
700	700x700 =490000	700x2 =1400
2	2x700 =1400	2 x 2 =4

490000+1400+1400+4
=492804

The sum of the areas of these four parts is the square of 702. Thus, the square of 702 is 492804.

(v) We have:

99 = 90 + 9

Let us draw a square having side 99 units. Let us split it into 90 units and 9 units.

	90	9
90	90x90 =8100	90x9 =810
9	9x90 =810	9x9 =81

8100+810+810+81
=9801

The sum of the areas of these four parts is the square of 99. Thus, the square of 99 is 9801.

********** END *********