Worksheet -6 Subject: - Mathematics Class: - VIII Teacher: - Ms. Neeru

Name: _____ Class & Sec: _____ Roll No. ____ Date: 11.08.2020

Question 4: Exercise 6.4

Find the least number which must be subtracted from each of the following numbers so as to get a perfect square. Also, find the square root of the perfect square so obtained:

(i) 402 (ii) 1989

825

iv

- (i) 402 (iii) 3250
- (iii) 3250 (v) 4000

Answer 4:

(i) 402

We know that, if we subtract the remainder from the number, we get a perfect square.

Here, we get remainder 2.

Therefore 2 must be subtracted from 402 to get a perfect square.

∴ 402 - 2 = 400

	20
2	4 02 - 4
40	- 00
	2

Hence, the square root of 400 is 20.

	20
2	4 00 - 4
00	- 00

(ii) 1989

We know that, if we subtract the remainder from the number, we get a perfect square.

Here, we get remainder 53. Therefore 53 must be subtracted from 1989 to get a perfect square.

1989 - 53 = 1936

	44
4	19 89
	- 16
84	389
	- 336
	53

Hence, the square root of 1936 is 44.

	44
4	19 36
	- 16
84	336
	- 336
	0

(iii) 3250

We know that, if we subtract the remainder from the number, we get a perfect square.

Here, we get remainder 1. Therefore 1 must be subtracted from 3250 to get a perfect square.

	57
5	32 50 - 25
107	750 - 749
	1

Hence, the square root of 3249 is 57.

	57
- 5	32 49
1	25
107	749
	749
	0

(iv) 825

We know that, if we subtract the remainder from the number, we get a perfect square.

Here, we get remainder 41. Therefore 41 must be subtracted from 825 to get a perfect square.

28 2 8 25 - 4 48 425 - 384 41

Hence, the square root of 784 is 28.

	28
2	7 84
48	384
	- 384
	0