

Name Key  
Mrs. Roubos

Date \_\_\_\_\_  
8R Period \_\_\_\_\_

Estimating Square Roots  
Homework Day 1

Each square root is between two consecutive integers. Name the integers.

Show all work!

1)  $\sqrt{10}$

$$\sqrt{9} < \sqrt{10} < \sqrt{16}$$

$$3 < \sqrt{10} < 4$$

$\sqrt{10}$  is between  
3 + 4

2)  $\sqrt{83}$

$$\sqrt{81} < \sqrt{83} < \sqrt{100}$$

$$9 < \sqrt{83} < 10$$

$\sqrt{83}$  is between  
9 + 10

3)  $\sqrt{19}$

$$\sqrt{16} < \sqrt{19} < \sqrt{25}$$

$$4 < \sqrt{19} < 5$$

$\sqrt{19}$  is between  
4 + 5

Each square root is between two consecutive integers. Name the integers.

Then say which integer it is closer to. Show all work!

4)  $\sqrt{33}$

$$\sqrt{25} < \sqrt{33} < \sqrt{36}$$

$$5 < \sqrt{33} < 6$$

33	36
-25	-33
8	3

$\sqrt{33}$  is between 5 + 6  
+ closer to 6

5)  $\sqrt{15}$

$$\sqrt{9} < \sqrt{15} < \sqrt{16}$$

$$3 < \sqrt{15} < 4$$

15	16
-9	-15
6	1

$\sqrt{15}$  is between 3 + 4  
+ closer to 4

6)  $\sqrt{105}$

$$\sqrt{100} < \sqrt{105} < \sqrt{121}$$

$$10 < \sqrt{105} < 11$$

105	121
-100	-105
5	16

$\sqrt{105}$  is between 10 + 11  
+ closer to 10