Name Key

Mrs. Roumbos

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) $\sqrt{33}$

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

$5 < \sqrt{33} < 6$

$33 - 25 = 8$ $\quad$ $36 - 33 = 3$

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

5) $\sqrt{15}$

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

$3 < \sqrt{15} < 4$

$15 - 9 = 6$ $\quad$ $16 - 15 = 1$

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

6) $\sqrt{105}$

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

$10 < \sqrt{105} < 11$

$105 - 100 = 5$ $\quad$ $121 - 105 = 16$

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