WARM UP

- Turn to page 8 and answer Check Skills questions 1-5. (In upper left hand corner)

MATH COURSE I

Estimation Strategies

September 10 - 11, 2012

Mrs. Culverwell

VOCABULARY

- <u>Clustering</u>: round the numbers to the same value <u>Clustering Example</u>

- <u>Compatible Numbers</u>: numbers that are close to the numbers in the problem that are easier to solve mentally <u>Compatible Numbers Example</u>

- <u>Front End Estimation</u>: round numbers to the leftmost place

- <u>Rounding</u>: replacing the numbers with similar numbers at the given place value

Clustering

Use clustering when the numbers are close in value.

Example:

15.5 + 14.9 + 15.1 + 15 =

Round them all to 15.

15 x 4 = 60

Compatible Numbers

Use when you can round one or both of the numbers to a similar number to compute mentally.

Example:

52 x 21 =

50 x 20 = 1,000

Front End Estimation (least useful)

- **Round numbers to the first place value.**

Example:

67 + 81 =

60 + 80 =

Example:

256 – 51 =

200 – 50 = 150

Decimals Example:

$$0.98 \approx 1$$

3.98
6.49
9.08
$+ \$3.47$

$0.49 \approx$
$0.08 \approx 1$
$+ 0.47 \approx$
$\overline{}$
2

$3 + 6 + 9 + 3 + 1 + 1 = \$23$

PRACTICE

- Page 10 questions 7-10, 11-18, 19-27.