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Modified In-School Off-School Approach Modules (MISOSA)
Distance Education for Elementary Schools
SELF-INSTRUCTIONAL MATERIALS



DECIMALS



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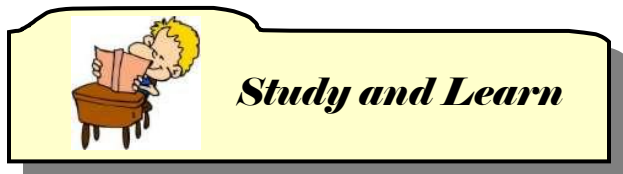
DECIMALS

Objective: Round decimals to the nearest tenths/hundredths/thousandths



Write in your answer sheet the place value of 5 in each given number.

- | | |
|------------|------------|
| 1) 7.3259 | 6) 3.52 |
| 2) 136.252 | 7) 5.123 |
| 3) 37.533 | 8) 0.305 |
| 4) 9.3225 | 9) 13.158 |
| 5) 0.568 | 10) 51.312 |



Read and understand the story problem below.

The Philippine Monkey-Eating Eagle is the second largest eagle in the world. It weighs 7.85 kilos. It's one of the endangered species, so we have to protect and preserve them.

How do we round off 7.85?
Do you know how to round off decimal numbers?

Let's see.

- To round off a decimal number, encircle the digit in the place you want to round it off.





Example: $7\textcircled{8}5$ $1.3\textcircled{5}23$

- **Look at the digit to the right of the encircled numbers.**

- a. If the digit is 5 or greater, add one to the encircled digit and drop all digits to the right.

$$5\textcircled{2}93 = 5.3 \quad 9 \text{ is } > 5$$
$$0.15\textcircled{6}9 = 0.55 \quad 6 \text{ is } > 5$$

- b. If the digit is less than 5, keep the encircled digit and drop all digits to the right.

$$3.5\textcircled{2}3 = 3.5 \quad 2 \text{ is } < 5$$
$$0.89\textcircled{4} = 0.89 \quad 4 \text{ is } < 5$$

- c. If the digit to be rounded off is 9 and it is followed by a digit more than 5, add 1 to the digit to be rounded off.

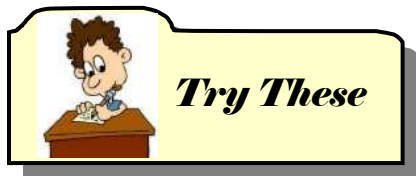
Example: $0.2\textcircled{9}6 = 0.30$
 $1.\textcircled{9}83 = 2.0$

Let's try another example.

This time let us round 7.89 to the nearest whole number.

$7.89 = 8$ (since the digit to the right of 7 is 8 which mean, round up)

$13.47 = 13$ Why?



A. Round to the nearest whole number.

- 1) 6.437
- 2) 0.98

- 3) 94.86
- 4) 215.963

- 5) 11.798
- 6) 9.982





B. Round to the nearest tenth.

1) 7.39

3) 26.45

5) 115.26

2) 0.826

4) 39.06

6) 59.96

C. Round to the nearest hundredths.

1) 28.736

3) 37.678

5) 112.999

2) 19.158

4) 9.241

6) 7.046

D. Round to the nearest thousandth.

1) 8.53967

3) 12.98362

5) 4.58467

2) 0.76463

4) 3.54545

6) 7.911659



Wrap Up

To round a decimal:

- Look at the digit in the place which the decimal is to rounded.
- If the digit to the right is 5 or more, add 1 to the digit in the place you are rounding to. Drop all the digits to its right.
- If the digit to the right of the rounding place is less than 5, drop that digit and other digits to its right.





On Your Own

Complete the chart.

	Rounded to the Nearest...				
	Whole Number	Tenth	Hundredth	Thousandth	Ten Thousandth
1) 3.89376					
2) 1.23456					
3) 9.82397					
4) 121.82765					
5) 49.25432					

Check your answer with the answer key. If you get...

- 4-5 - Excellent! You may now proceed to the next lesson.
- 3-2 - You need to review the processes you missed.
- 0-1 - You need to repeat the whole process. Ask your teacher or elder to help you.



Key to Correction DECIMALS

REVIEW

- 1) thousandth
- 2) hundredth
- 3) tenth
- 4) ten thousandth
- 5) tenth
- 6) tenth
- 7) ones
- 8) thousandth
- 9) hundredth
- 10) tens

TRY THESE

A.

- 1) 6
- 2) 1
- 3) 95
- 4) 216
- 5) 12
- 6) 10

B.

- 1) 7.4
- 2) 0.8
- 3) 26.5
- 4) 39.1
- 5) 115.3
- 6) 60.0

C.

- 1) 28.74
- 2) 19.16
- 3) 37.68
- 4) 9.24
- 5) 113
- 6) 7.05

D.

- 1) 8.540
- 2) 0.765
- 3) 12.984
- 4) 3.545
- 5) 4.585
- 6) 7.912

ON YOUR OWN

	Rounded to the Nearest...				
	Whole Number	Tenth	Hundredth	Thousandth	Ten Thousandth
1) 3.89376	4	3.9	3.89	3.894	.8938
2) 1.23456	1	1.2	1.23	1.235	1.2346
3) 9.82397	10	9.8	9.82	9.824	9.8240
4) 121.82765	122	121.8	121.83	121.828	121.8277
5) 49.25432	49	49.3	49.25	49.254	49.2543

