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ROUNDING DECIMALS TO THE NEAREST TENTHS, HUNDRETHS, AND THOUSANDTHS

ROUNDING DECIMALS TO THE NEAREST TENTHS/ HUNDREDTHS/THOUSANDTHS

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

Review

A. Round off the whole number to the indicated place value.

_____ 1) 6 754 (hundreds)
_____ 2) 58 495 (thousands)
_____ 3) 37 638 (tens)
_____ 4) 138 754 (ten thousands)
_____ 5) 76 850 000 (millions)

B. Choose the numerals that will round to the given number at the left.

_____ 6) 800   (748   854   775)
_____ 7) 1 000   (1 565   1 040   1 775)
_____ 8) 20 000   (20 218   18 999   19 635)
_____ 9) 95 000   (94 750   95 500   95 475)
_____ 10) 8 000 000   (8 900 000   8 525 000 8 300 000)

Check your answer with the answer key. If your score is 8 to 10, you may continue with this lesson. If you got 7 or below, review your past lessons.
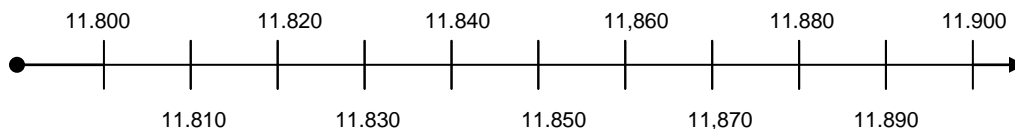
A. Study the problem opener.

> During the Palaro ng Bayan, Aris ran the 100-metre dash in 11.843 seconds. Mike ran the same event in 11.861 seconds. Who is faster between the two runners?

Let us use the decimal numbers in the problem.

Analyze the number line.

11.800		11.820		11.840		11,860		11.880		11.900
	11.810		11.830		11.850		11,870		11.890	

- How many seconds it take Aris to cover the 100-metre dash? *11.843 seconds*
- Locate this in the number line.
- Let us round the number 11.843 to the nearest tenths.
- Where is it close to? *11.800 or 11.900*
- What time was utilized by Mike to cover the 100-metre dash? *11.861 seconds*
- Locate this in the number line.
- Where is it close to? *11.800 or 11.900*

Therefore, 11.843 round off to the nearest tenths is 11.8 and 11.861 round off to the nearest tenths is 11.9.

B. Let's discover the pattern in rounding off decimals. Examine the examples below.

0.3168	rounded to tenths	= 0.3
	rounded to hundreds	= 0.32
	rounded to thousands	= 0.317

0.2871	rounded to tenths	= 1.3
	rounded to hundredths	= 1.29
	rounded to thousandths	= 1.287

- What will you consider when rounding decimals. (The digit to be rounded and the number to the right of it.)
- What happens to the digit of the place value you are rounding if it is 5 or higher or lower than 5? (Add 1 to the digit to be rounded if 5 or higher retain the digit if less than 5.)

Try These
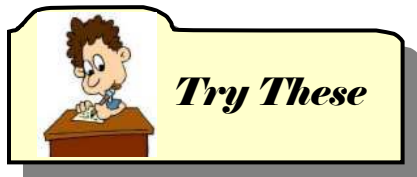
A. Round the following to the nearest value asked.

		Tenths	Hundredths	Thousandths
1)	8.7256			
2)	12.6321			
3)	87.0568			
4)	22.0054			
5)	35.1069			

B. Round to the place value of the underlined digit.

_____ 1) 0.6<u>5</u>3   _____ 4) 12.46<u>2</u>3
_____ 2) 0.<u>4</u>67   _____ 5) 4.18<u>3</u>2
_____ 3) 6.8<u>3</u>21

W'rap Up

How do we round decimals to the nearest tenths? Nearest hundredths?
Nearest thousandths?

> To round decimals to the nearest tenths, hundredths and thousandths, we consider the digit to be rounded and the number to the right. Add 1 to the digit to be rounded if the digit to the right is 5 or higher. Otherwise retain the digit.

On Your Own

A. Round the following to the indicated place value:

_____ 1) 0.6542 (nearest tenths)
_____ 2) 0.9568 (nearest thousandths)
_____ 3) 10.2346 (nearest hundredths)
_____ 4) 73.6834 (nearest thousandths)
_____ 5) 25.1934 (nearest tenths)

B. Complete the table.

		Nearest Tenths	Nearest Hundredths	Nearest Thousandths
1)	89.6273			
2)	0.8495			
3)	5.0637			
4)	347.9641			
5)	93.4672			

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

16-20   -   Excellent! You may now proceed to the next lesson.

11-15   -   You need to review the processes you missed.

0-10   -   You need to repeat the whole process.
Ask your teacher or elder to help you.