

Apprenticeship Math 12
NOTES: Place Value and Rounding

Name: Ms. B
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Place Value

millions 1 000 000	hundred thousands 100 000	ten thousands 10 000	thousands 1 000	hundreds 100	tens 10	ones 1	DECIMAL POINT	tenths 0.1 ($\frac{1}{10}$)	hundredths 0.01 ($\frac{1}{100}$)	thousandths 0.001 ($\frac{1}{1000}$)	ten thousandths 0.0001 ($\frac{1}{10000}$)
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2 5 7 8 3 1 4 . 7 2 6 8

* no one-ths!

two million, five hundred seventy eight thousand, three hundred fourteen **AND** seven thousand two hundred sixty eight ten thousandths

Rounding

- Underline the digit in the place value spot you are asked to round to.
- If the number to the right is 5 or larger, round the underlined digit up by one.
If the number to the right is 4 or smaller, keep the underlined digit the same.
- If your underlined digit is on the left-hand side of the decimal point, add zeros to maintain place value.
If your underlined digit is on the right-hand side of the decimal point, cut it off there.

For each of the following, state the place value of the underlined digit and round to that place value.

- | | | |
|---------------------|--------------------------|----------------|
| a. <u>2</u> 3 | <u>tens</u> | <u>20</u> |
| b. 1 <u>4</u> 56 | <u>hundreds</u> | <u>1500</u> |
| c. 9 <u>8</u> 4 741 | <u>thousands</u> | <u>985 000</u> |
| d. <u>7</u> 893 | <u>thousands</u> | <u>8000</u> |
| e. 4 <u>2</u> 01 | <u>tens</u> | <u>4200</u> |
| f. <u>2</u> 45 485 | <u>hundred thousands</u> | <u>200 000</u> |

g.	0.023	<u>hundredths</u>	<u>0.02</u>
h.	0.00854	<u>ten thousandths</u>	<u>0.0085</u>
i.	0.073899	<u>ten thousandths</u>	<u>0.0739</u>
j.	0.989	<u>tenths</u>	<u>1.0</u>
k.	1.2841	<u>hundredths</u>	<u>1.28</u>
l.	23.2197	<u>thousandths</u>	<u>23.220</u>

Comparing and Ordering Decimal Numbers

Arrange each set of numbers from least (smallest) to greatest (largest).

a. 0.06, 0.066, 0.606, 0.66, 0.6

b. 0.75, 0.705, 0.075, 0.507, 0.57

0.060 ✓
 0.066 ✓
 0.606 ✓
 0.660 ✓
 0.600 ✓

0.750 ✓
 0.705 ✓
 0.075 ✓
 0.507 ✓
 0.570 ✓

0.06, 0.066, 0.6, 0.606, 0.66

0.075, 0.507, 0.57, 0.705, 0.75

Arrange from smallest to largest.

Place the following numbers on the number line.

0.0167

0.015

0.0105

0.018

0.013



0.0167 ✓
 0.0150 ✓
 0.0105 ✓
 0.0180 ✓
 0.0130 ✓

0.0105, 0.013, 0.015, 0.0167, 0.018