Name			

## Review for Math Mid-Module Assessment

- 1) Compare using < , = , or >.
- a) 0.5 > 0.237
- b) 3 thousandths + 2 hundredths \_\_\_< \_\_\_ 0.099
- c) 6 tens 2 tenths 1 thousandth \_\_\_\_\_< 60.21
- d) 34 tenths \_\_\_< 3.5
- e)  $3 \times 10^{3} + 2 \times 10^{2} + 7 \times \frac{1}{10}$  = \_\_\_3,000 + 2 ×  $10^{2}$  + 7 ×  $\frac{1}{10}$ f) 0.740 > \_\_\_ 7 ×  $\frac{1}{10}$  + 4 ×  $\frac{1}{1000}$
- 2) Model the number 7.77 on the place value chart.

Tens	Ones	Tenths	Hundredths	Thousandths	
	7	7	7		

3) Use words, numbers, and your model to explain why each of the numbers has a different value. Be sure to use "ten times as much" and "one tenth of" in your explanation.

Example Answer: The "7" to the left of the decimal is 10 times bigger than the "7" to the right of the decimal. The "7" in the hundredths place is one tenth the size of the "7" in the tenths place.

4) Multiply 7.77 x  $10^2$ . Explain the shifts of the digits, the change of value of each digit, and the number of zeroes in the product.

Solution: 777

The digits move two place values or 10 x10. Each place value is 10 times bigger than the one next to it. There are not any zeros in the product.

5) Divide the product above by  $10^2$ . Explain the shifts of the digits and how the value of each digit changed.

Solution: 7.77

The digits move two place values or divided by 100 or divided by  $10^2$ . Each place value is 10 times bigger than the one next to it. There are not any zeros in the product.

6) Rainfall collected in a rain gauge was found to be 4.3 centimeters when rounded to the nearest tenth of a centimeter. Circle the measurements below that could be the actual measurement of the rainfall. 7) Convert 4.3 cm to meters.

There are 100cm in 1 m. We are changing a smaller unit to a larger unit, therefore our number will get smaller. We need to divide.

$$\frac{4.3 \div 100 = .043 \text{m}}{4.3 \div 10^2 = .043 \text{m}}$$

8) Put the following decimal numbers in order from least to greatest.

9) Round each of the numbers above to the nearest tenth.

10) If someone runs exactly 4.5 kilometers each day, how far would they run in 100 days?

4500 km

11) Write an equation for the problem above using an exponent.

$$4.5 \times 10^2 = 4500 \text{ km}$$