Topic 6 Review Notes:

6.1 – 6.2 Terminating, Repeating, and Non-Repeating Decimals

|  |  |  |
| --- | --- | --- |
| *Terminating** **A decimal that ENDS** (Think about how an “exterminator” ENDS the bugs)
* **Example: 0.2346**
 | *Repeating** **Repeats the same block** of numbers forever
* **Example: 0.45454545…**
 | *Non-Repeating** **Never repeats and goes on forever**
* **0.15262847492…**
 |
| *Long Division** **“Top dog in the house”**
* Top number of the fraction goes under the long division house.
* Bottom number in fraction goes on the outside of the house.
* **Example:**

 |

6.3 – 6.4 Percents Greater than 100 and Less than 1

|  |  |
| --- | --- |
| *Greater than 100** **150%**
* This is usually a comparison of the old and the new. For example, the old item might be 100% where the new item might have increased to 300%, or 3 times as much.
* **Example:** On Monday, Miss Mampre drove 20 miles. Over the weekend, she took a road trip and drove 80 miles. She drove \_\_\_\_\_% miles over the weeknd than Monday.
* **20 🡪 80 = x4**
* **So 100 x 4 = 400%**
 | *Less than 1** **A fraction of a percent (NOT EVEN A WHOLE PERCENT!)**
* This is usually all about conversions, really understanding what a fraction of a percent is.
* **Example**: What percent is 12 of 3000?

Is over of = percent over 100* 12/3000 = x/100 so x = 0.4%
* Write 0.78% as a fraction and a decimal.
* **78/100% 0.78% / 100 = 0.0078**
 |

6.3 – 6.4 Percents Greater than 100 and Less than 1 PRACTICE



6.5 Converting between fraction, decimals, percents:







6.6 Percent Error

Finding the percentage of how far off your estimate is off of from the actual.

The closer to zero the better your estimate is.

There never is 100% error.

FORMULA:

Percent Error = |Actual – Estimated| x100

 Actual

**BE SURE YOU TAKE THE ABSOLUTE VAULE!**



Actualy: 80

Estimate: 75 (Even though he “actually” read it from the thermometer, it was still a tool to estimate. The scientific answer is the actual value.)

Percent error = | 75 – 80 | x 100 | -5 | x 100 5 x 100 = 6.7% error

 75 75 75