## Rounding

Value of the Place and Representing Numbers
Let's take a look at the number 3529.6
How would you read this number?
What is the place value of each digit?

| Sample Numbers |  |  |  |  | Value of the Place |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Millions |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  | 3 |  |
|  |  |  |  | 5 | Hundreds |
|  |  |  |  | 2 |  |
|  |  |  |  | 9 |  |
|  |  |  |  | $\bullet$ | Decimal |
|  |  |  |  | 6 |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Example 1 Write the place value of the underlined digit.
a) $25.9 \underline{3}$
b) $4 \underline{5} 6.1$

Example 2 Round each number to the nearest tenth, hundredth, and thousandth.

|  | Tenth | Hundredth | Thousandth |
| :--- | :--- | :--- | :--- |
| 12.4678 |  |  |  |
| 45.5998 |  |  |  |
| 0.9643 |  |  |  |

## Exponents

Power: $3^{4}$, what does this mean?
Exponents are a way of simplifying a repeated multiplication.
Example 1 Write the following as a power in Exponential Form.
a) $2 \cdot 2 \bullet 2 \bullet 2$
b) $(-4)(-4)(-4)(-4)(-4)$
c) $a \bullet a \bullet a$
d) $x x$
e) $6.2 \times 6.2 \times 6.2$

Example 2 Use the exponent button on your calculator to evaluate the following.
a) $7^{2}$
b) $6^{3}$
c) $9^{4}$
d) $4.7^{5}$

Example 3 Express 81 as a power of
a) 3
b) 9

