ST. JEAN DE BREBEUF
MATHEMATICS

NUMBER SENSE

INTRODUCTION:

ROUNDING NUMBERS

NUMBER SENSE

INTRODUCTION: ROUNDING NUMBERS

Before we talk about rounding, let's review **place values**

WHAT IS ROUNDING?

Rounding involves *reducing* the number of digits in a number while keeping its value similar

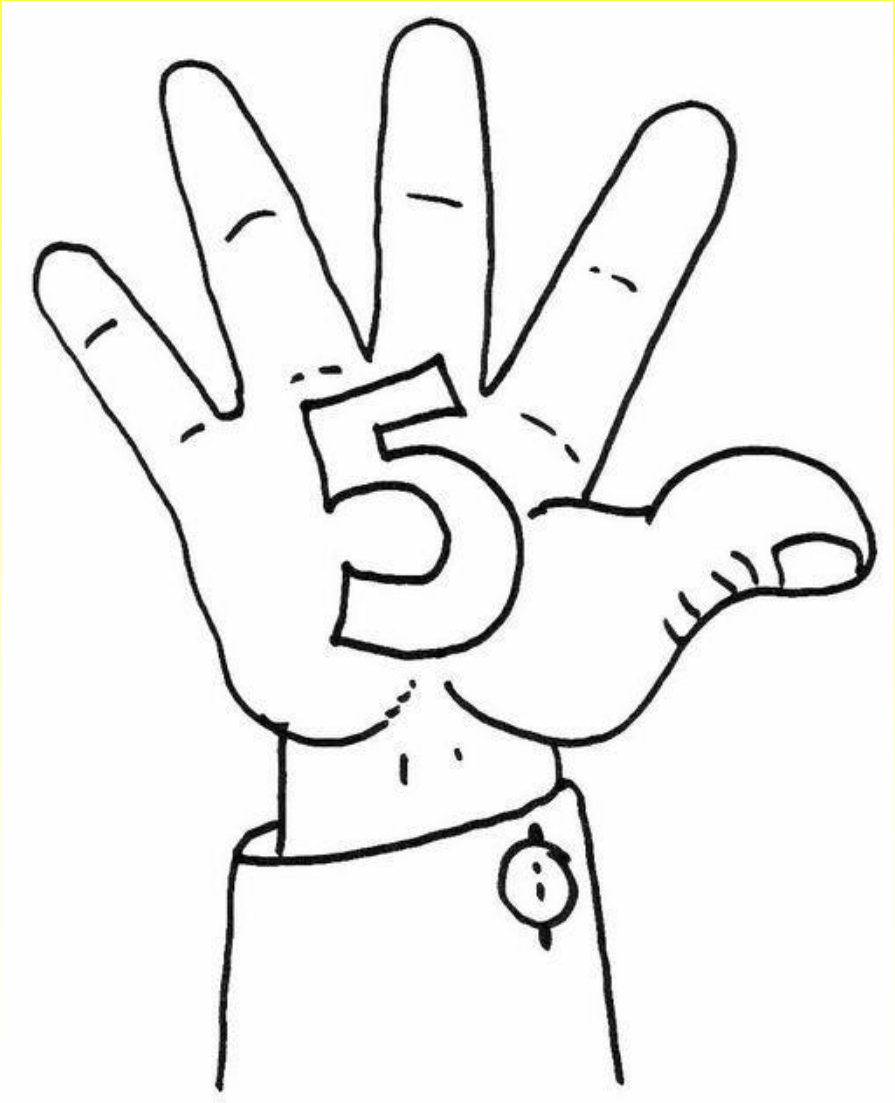
→Although it is easier to use, it is not as accurate

EXAMPLE: **$5.97** rounded to the nearest dollar is $_____6_____.

Although it is an easier number to use, you are three cents off the real value.

NUMBER SENSE

INTRODUCTION: ROUNDING NUMBERS



HOW TO ROUND

1. Decide the last digit you will keep or change

2. Look at the number to the *right* and determine whether you **round down** or **round up**

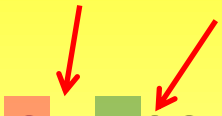
If the digit is less than 5, the number remains the same (this is called **rounding down**)

If the digit is 5 or more, the number increases by 1(this is called **rounding** up)

NUMBER SENSE

INTRODUCTION: ROUNDING NUMBERS

EXAMPLE



Consider the number **235.762**

(a) Round this number to the **nearest ten**

240

(b) Round this number to the **nearest tenth**

235.8

HOW TO ROUND

1. Decide the last digit you will keep or change

2. Look at the number to the *right* and determine whether you **round down** or **round up**

If the digit is less than 5, the number remains the same (this is called **rounding down**)

If the digit is 5 or more, the number increases by 1(this is called **rounding** up)

NUMBER SENSE

INTRODUCTION: ROUNDING NUMBERS

EXAMPLE

Consider the number **235.762**

(c) Round this number to the **nearest hundred**

200

(d) Round this number to the **nearest hundredth**

235.76

HOW TO ROUND

1. Decide the last digit you will keep or change

2. Look at the number to the *right* and determine whether you **round down** or **round up**

If the digit is less than 5, the number remains the same (this is called **rounding down**)

If the digit is 5 or more, the number increases by 1(this is called **rounding** up)

NUMBER SENSE

INTRODUCTION: ROUNDING NUMBERS

EXAMPLE

Consider the number **235.762**

(e) Round this number to the **nearest whole number**

236

(f) Round this number to **four significant digits**

**** To round to a certain number of digits, count digits from left to right and round from there.*

235.8

HOW TO ROUND

1. Decide the last digit you will keep or change

2. Look at the number to the *right* and determine whether you **round down** or **round up**

If the digit is less than 5, the number remains the same (this is called **rounding down**)

If the digit is 5 or more, the number increases by 1(this is called **rounding** up)

NUMBER SENSE

INTRODUCTION: ROUNDING NUMBERS

EXAMPLE

Consider the number **235.762**

Note on **significant digits**
→ When counting digits from left to right, you do not include leading zeros

EXAMPLE: The number **0.00047** would have only two significant digits

(f) Round this number to **four significant digits**

**** To round to a certain number of digits, count digits from left to right and round from there.*

235.8

HOW TO ROUND

1. Decide the last digit you will keep or change

2. Look at the number to the *right* and determine whether you **round down** or **round up**

If the digit is less than 5, the number remains the same (this is called **rounding down**)

If the digit is 5 or more, the number increases by 1(this is called **rounding** up)

Homework:

Handouts