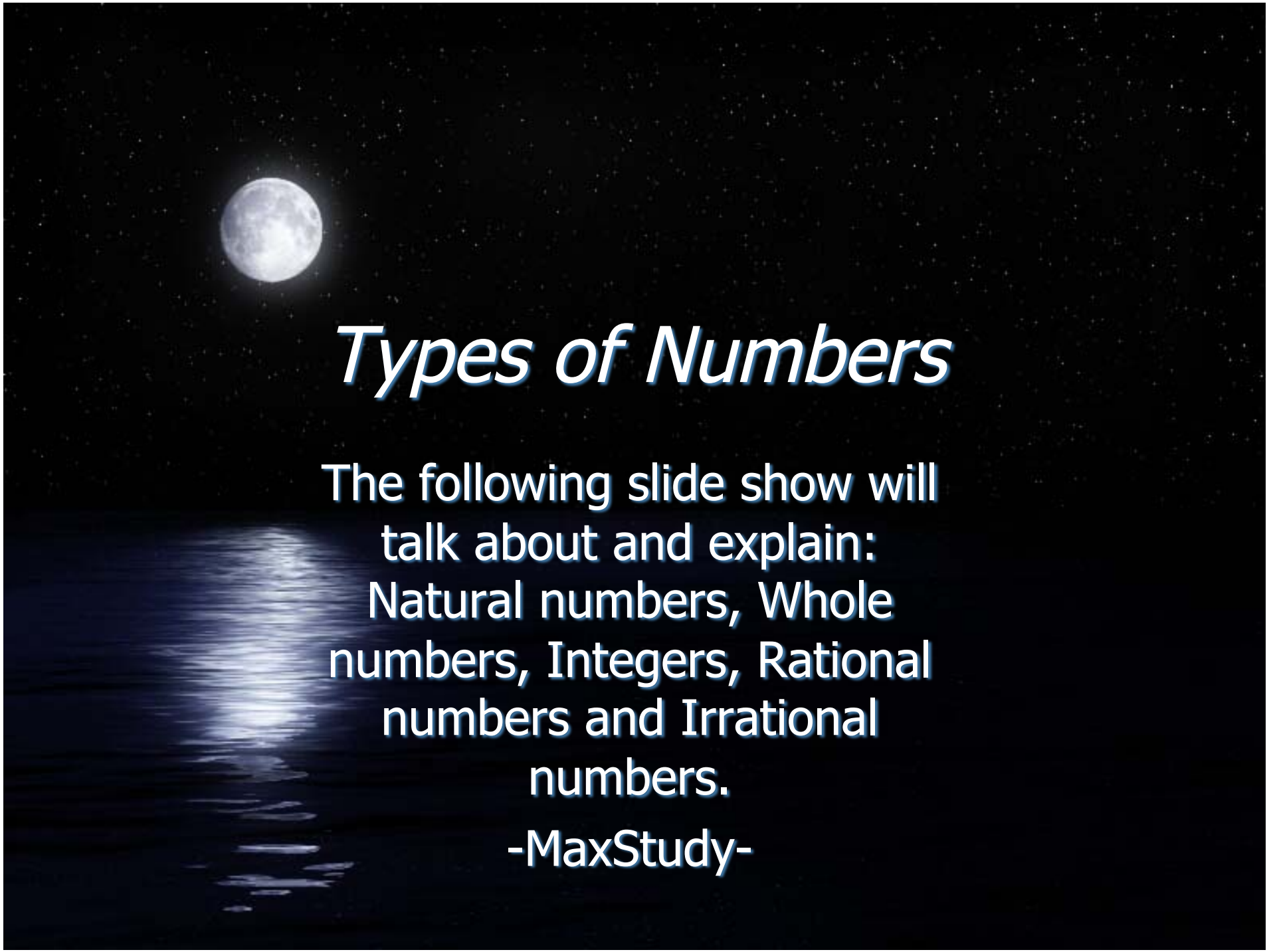
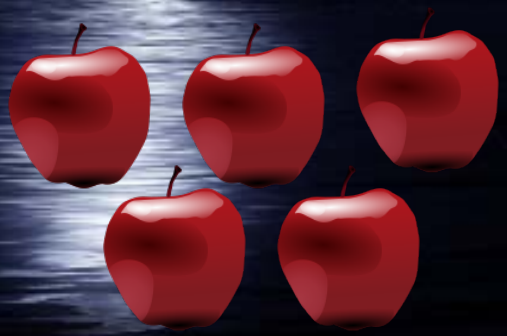

Types of Numbers
The following slide show will talk about and explain: Natural numbers, Whole numbers, Integers, Rational numbers and Irrational numbers.
-MaxStudy-

Natural Numbers

- A natural number is any positive number, all the way from zero to ∞ (infinity)
- They are also known as counting numbers, when you first learned how to count:
- 1,2,3,4,5 …….
- Some examples:
- 56; 79; 1,239; 1,985,006,523

Natural Numbers in everyday life

- Natural - can be used used for finding how much there is of something.
- Example:



5 apples plus 3 apples is 8 apples.

Whole Numbers

- Whole numbers are all natural numbers and zero, which is all numbers from zero to ∞ (infinity)
- You can remember whole numbers because it is the "Whole" set of natural numbers plus zero (the "o" in whole looks like a zero).
- Some examples:
- 0; 72; 897; 5,934,561; 190, 007, 846, 563, 987

Whole numbers used in everyday life

- Whole numbers can be used just like natural numbers and in other ways.
- Example:

There are 15 boys and 0 girls in the classroom.

Integers

- Integers are natural numbers and their opposites
- (ex. 2 an -2)
- They also include zero
- Integers can't be decimals!
- It ranges from - ∞ (negative infinity) to ∞ (positive infinity)
- Some examples:
- -5,897,687,451; -670,000, -17; 22, 567; 876, 567, 809

Integers

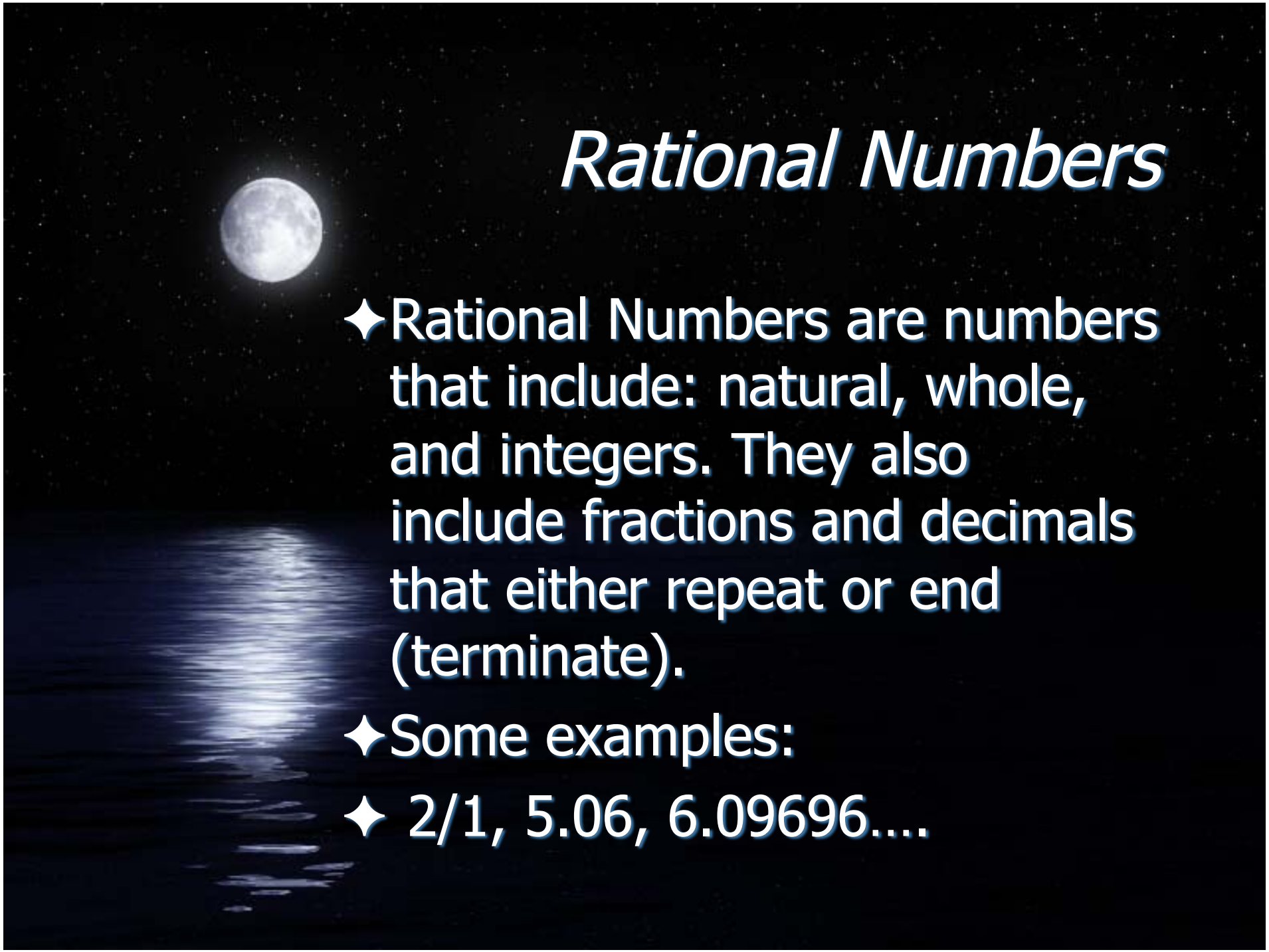
- With integers, the order of negative numbers are the opposite of positive like: -45 is less than -7 compared to 45 is greater than 7.
- You can use a number line to help you:

Integers in Everyday Life

- Integers can be used in many ways:
- It can be used for weather:
- The temperature is - 20

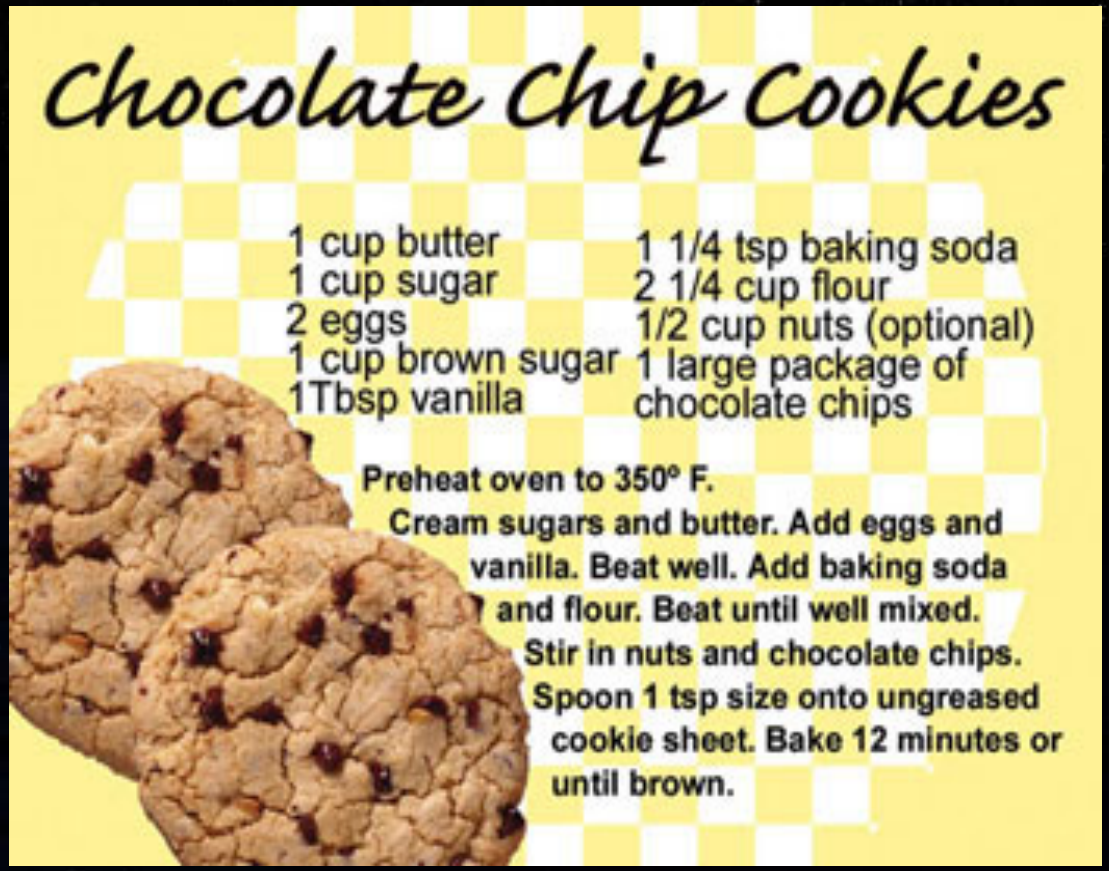
degrees and it rose 14 degrees.

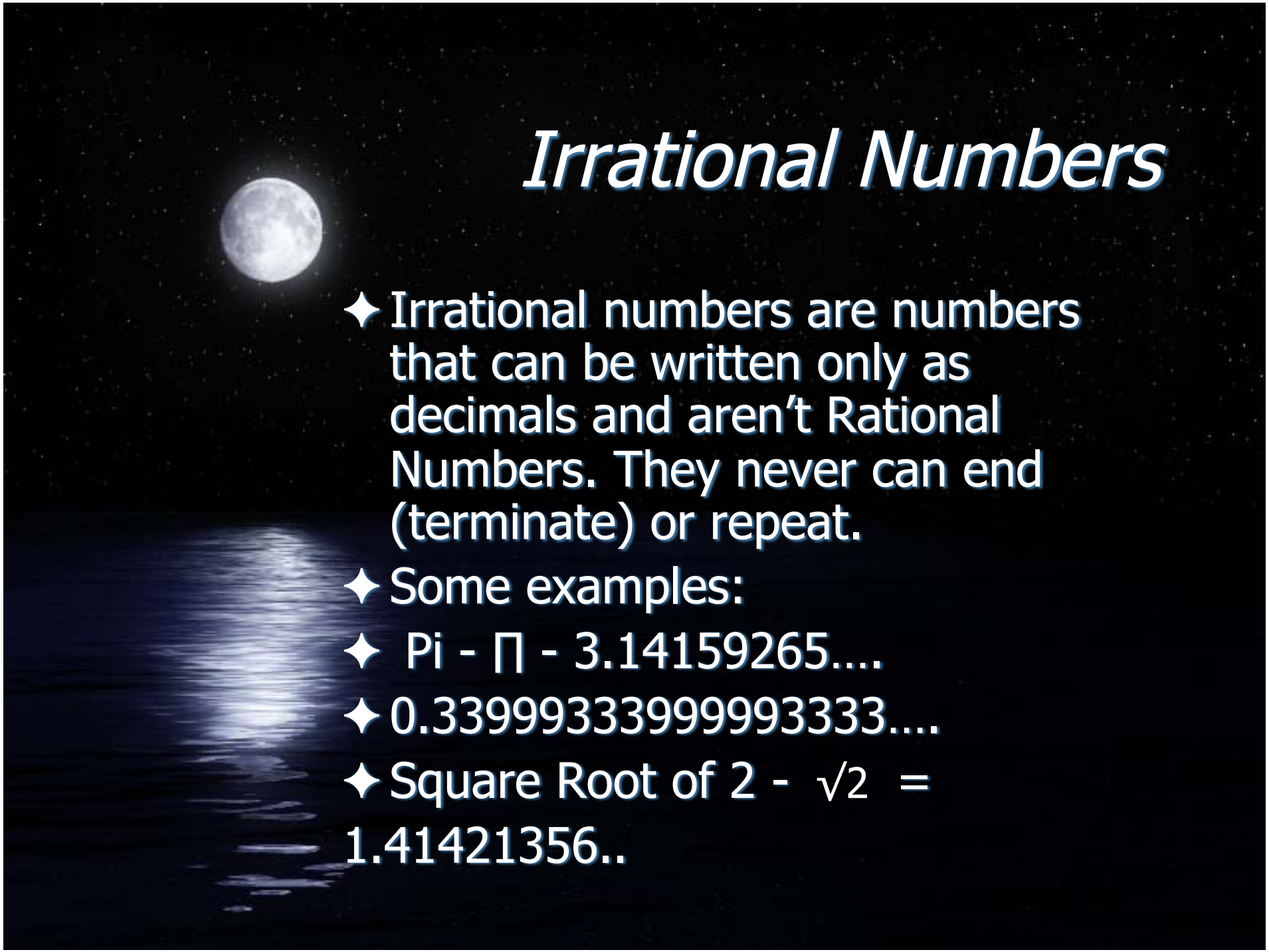
- It can be used to find a test grade
- 15 points off on the test and 5 points extra credit
- It can be used to measure loss or gain in value in an investment (stock).
- North inc. lost $124 on Tuesday and gained $97 on Wednesday.

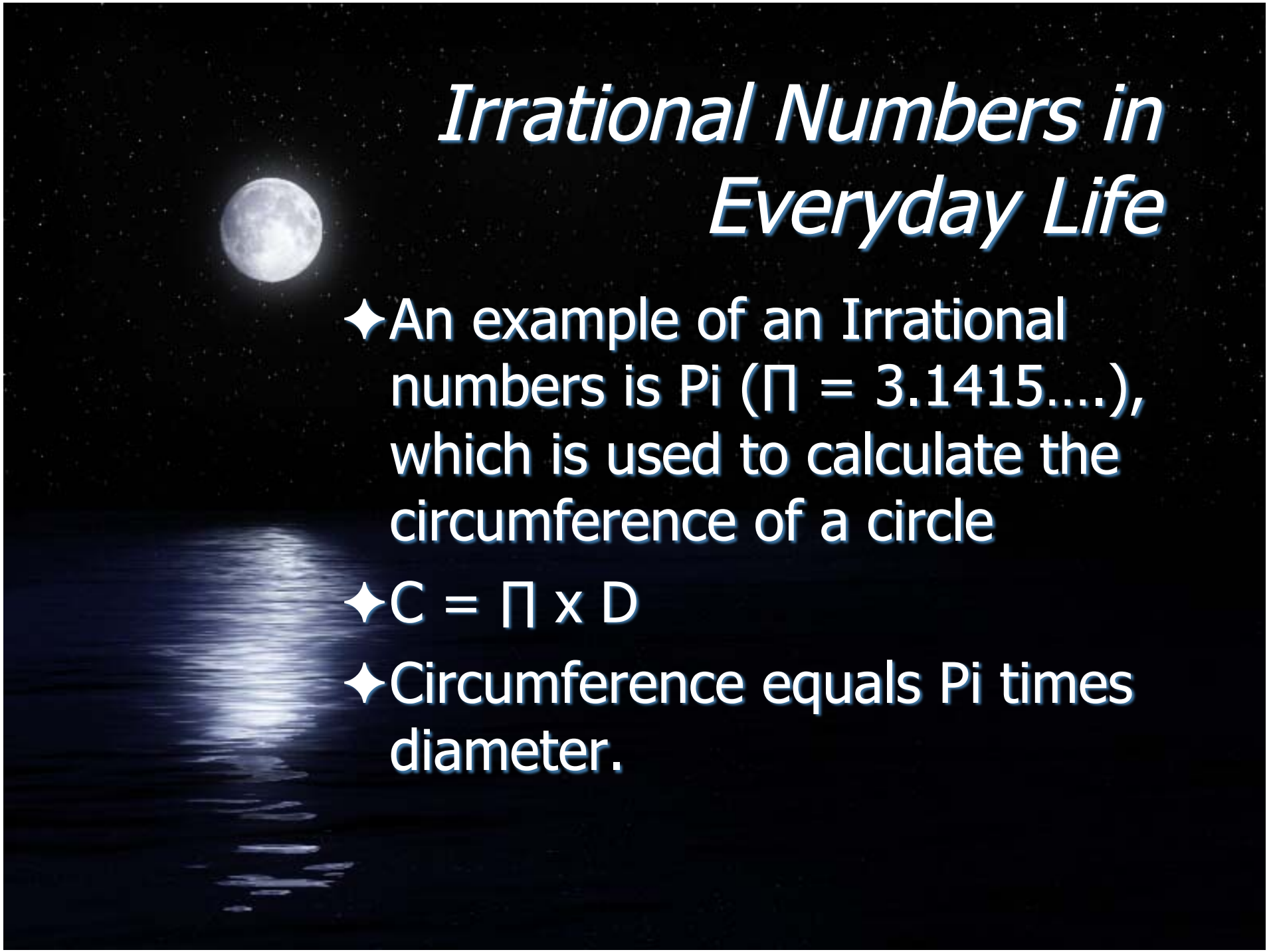

Rational Numbers
✦Rational Numbers are numbers that include: natural, whole, and integers. They also include fractions and decimals that either repeat or end (terminate).
✦Some examples:
✦ 2/1, 5.06, 6.09696….

Rational Numbers in Everyday Life

- A rational number can be used for a recipe
- For example, this recipe for chocolate chip cookies asks for 1 1/4 teaspoons of baking soda, 2 1/4 cups of flour, and a 1/2 a cup of nuts.




Irrational Numbers
Irrational numbers are numbers that can be written only as decimals and aren't Rational Numbers. They never can end (terminate) or repeat.
Some examples:
Pi - Π - 3.14159265….
0.33999333999993333….
Square Root of 2 - √2 = 1.41421356..



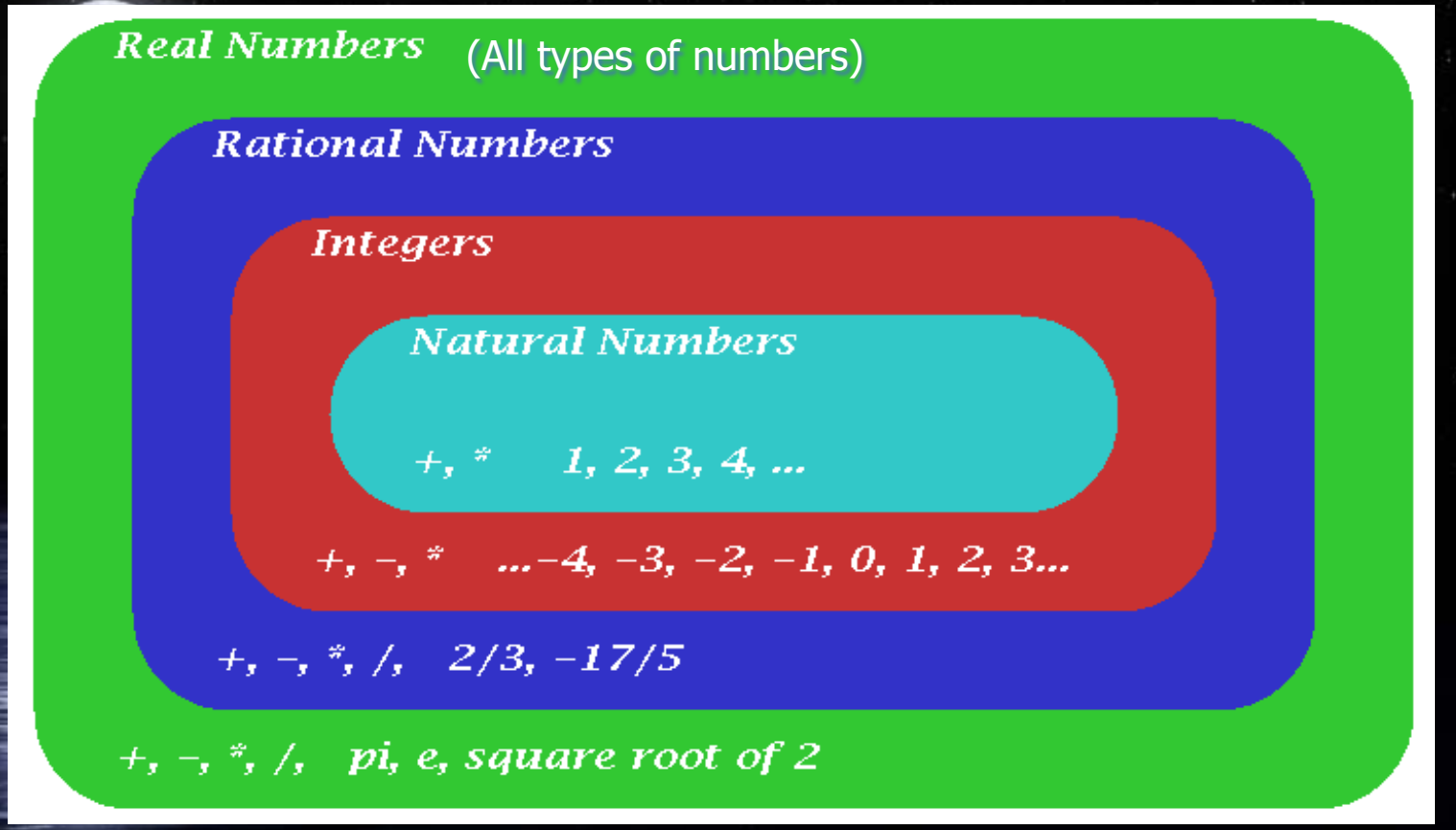
Irrational Numbers in Everyday Life

- An example of an Irrational numbers is Pi (Π = 3.1415….), which is used to calculate the circumference of a circle
- C = Π x D
- Circumference equals Pi times diameter.

Subsets

- Each of the numbers are subsets of each other:
- Natural Numbers are a subset of Whole Numbers
- Whole Numbers are a subset of Integers
- Integers are a subset of Rational Numbers
- An Irrational Number is totally different from a rational number but is still a real number
- All numbers are a subset of Real Numbers

A way to Remember Types of Numbers



- Irrational Numbers are real numbers that are not Rational Numbers.

What Type of Number is That?

- Below, say what type(s) of number(s) the number is.
- - 5/4
- 75
- - 532
- Π
- 7.2323…
- 5,009,786,867
- 9.422442244…