

## Student Worksheet

Name \_\_\_\_\_ Date \_\_\_\_\_

Note: We do not leave enough room for copy and past activities in order to display the questions in fewer pages.

Directions:

- Use the file "[Spirals.gsp](#)" to enter the numbers.

1. Define rational numbers.
2. Define irrational numbers.
3. Enter the following rational numbers ( $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{8}$ ,  $\frac{1}{10}$ ):

1<sup>st</sup> Rational:  $\frac{1}{4}$  Copy and Paste the GSP result in the space provided below:

2<sup>nd</sup> Rational:  $\frac{1}{5}$  Copy and Paste the GSP result in the space provided below:

3<sup>rd</sup> Rational:  $\frac{1}{8}$  Copy and Paste the GSP result in the space provided below:

4<sup>th</sup> Rational:  $\frac{1}{10}$  Copy and Paste the GSP result in the space provided below:

4. Enter the following irrational numbers ( $\pi$ ,  $e$ ,  $\sqrt{2}$ ).

1<sup>st</sup> Irrational:  $e$  Copy and Paste the GSP result in the space provided below:

2<sup>nd</sup> Irrational:  $\pi$  Copy and Paste the GSP result in the space provided below:

3<sup>rd</sup> Irrational:  $\sqrt{2}$  Copy and Paste the GSP result in the space provided below:

5. Compare the sketches from questions 3 and 4, and describe the similarities and differences of each sketch focusing on rational and irrational number behaviors.