1. What is the difference between rational and irrational numbers?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Is $\sqrt{121} $ rational or not? Explain your answer. Show your work.

1. Give an example of each of the 4 different types of rational numbers:

 \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

 Now turn them all into fractions.

 \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_

1. Is the number 0 rational? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What does it mean to “find the decimal expansion?”\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Find the decimal expansion of 5/6. Show your work.
2. When you are finding the decimal expansion of a fraction, how do you know when to stop long dividing? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Find the decimal expansion for 232/999.
4. Find the estimated decimal expansion for $\sqrt{47}$. Show your work.
5. Convert 4.36 into a fraction and simplify it.
6. As I was in the mountains, squatch hunting and doing math, I had to change 0.78787878…. into a fraction. I wrote it as $\frac{787}{999}$ and then reduced it. Am I good to go? \_\_\_\_\_\_\_\_\_ Why?\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Change $0.\overbar{432}$ to a fraction and simplify it.
2. Solve each square root.

$$\sqrt{121} = \sqrt{16}= $$

$$\sqrt{81}= \sqrt{196}=$$

1. Write $6\frac{7}{11}$ as a decimal.
2. Write $3\frac{3}{8}$ as a decimal.

Circle the greater number, and **show why it’s greater**.

1. 7/8 or 0.88?
2. $-\sqrt{22}$ or $-\frac{9}{2}$ ?
3. 0.675 or $\frac{27}{40}$ ?

1. Rewrite the numbers in order from least to greatest.

3.84, $\sqrt{64}$, $-\sqrt{82}$, -9.3, 0, $\sqrt{13}$

Order: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_