Slide 1: How would you describe the numbers shown in slide 1?

Slide 3: Your teacher explains that each of the numbers in slide 1 is also a *rational number*. Using what you already know about these numbers how might you describe a *rational number*?

Slide 6: A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$

What do you think a *number in the form* $\frac{m}{n}$ refers to?

What are some other ways to describe numbers written in the form $\frac{m}{n}$?

Slide 8

A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$

In the form $\frac{m}{n}$, why can't *n* be zero?

Slide 11:

A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$

If the form $\frac{m}{n}$ is referring to a fraction, what happens if the number is a *whole number*?

Can a *whole number* be written in the form $\frac{m}{n}$?

Slide 13:

A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$

If the form $\frac{m}{n}$ is referring to a fraction, what happens if the number is a *decimal number*?

Can a *decimal number* be written in the form $\frac{m}{n}$?

Slide 16: A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$

How would you describe numbers that are integers?

Slide 18:

A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$

Can an *integer* be written in the form $\frac{m}{n}$?

Slide 20: Two students are trying to agree upon a definition for rational numbers...

One student stated that a rational number is simply an integer

The other student stated that a rational number is the quotient of two integers

How would you explain/demonstrate that both students are correct?

Slide 22:

If a rational number is the quotient of two integers...

How do you determine the quotient of two integers? What could the quotient of two integers look like? Slide 24: Compare the two descriptions of a rational number

A rational number is any number that can be written in the form $\frac{m}{n}$, where *m* and *n* are integers and $n \neq 0$ A rational number can be written as a quotient of 2 integers with a zero denominator

Can you identify key words that you could use when determining if a number is a *rational number*?

Slide 26: How would you use your keywords to explain/demonstrate that –7 is a rational number?

Slide 28: How would you use your keywords to explain/demonstrate that $\frac{7}{8}$ is a rational number?

Slide 30: How would you use your keywords to explain/demonstrate that $\frac{-9}{4}$ is a rational number?

Slide 32: How would you use your keywords to explain/demonstrate that –0.75 is a rational number?

A rational number is any number that can be written in the form A rational number is the quotient of two integers $\blacksquare I \ can \ \underline{explain/demonstrate} \ why \ n \neq 0$ ⊠I can <u>define/write</u> integer values ØI can <u>explain/demonstrate</u> how I determine the quotient of two integers ⊠I can <u>write</u> examples of rational numbers ⊠I can <u>explain</u> why a number is a rational number