NAME _____

Lesson 2.1 Understanding Rational and Irrational Numbers

A **rational number** is a number that either terminates or repeats a pattern. It can be written as a fraction, $\frac{a}{b}$, where a and b are both whole number integers and b does not equal zero.

Here are some examples of rational numbers: $3, -5, \frac{1}{3}, 4.\overline{66}, \frac{5}{11}, 3.25$

An **irrational number** is any decimal that does not terminate and never repeats. These numbers are often represented by symbols.

Here are some examples of irrational numbers: $5.23143\ldots, \sqrt{5}, \pi$

Tell if each number is *rational* or *irrational*.

	a	b	c
1.	$\frac{1}{5}$	$\sqrt{5}$	-5
	_____	_____	_____
2.	$\sqrt[3]{27}$	$\frac{1}{3}$	2.354
	_____	_____	_____
3.	$\sqrt{36}$	$3.\overline{45}$	$\frac{7}{9}$
	_____	_____	_____
4.	$\sqrt{20}$	19.294153	$-\frac{4}{5}$
	_____	_____	_____
5.	$\sqrt{15}$	π	$-\frac{7}{10}$
	_____	_____	_____