

Rational/Irrational Worksheet

Name _____ Date _____

Classify these numbers as either rational or irrational and explain your reasoning.

1) 74

Why? _____

2) .01283...

Why? _____

3) $\frac{2}{15}$

Why? _____

4) .25

Why? _____

5) $\sqrt{36}$

Why? _____

6) 4.2435...

Why? _____

7) $\sqrt{2}$

Why? _____

8) π

Why? _____

Give an example of a number that would satisfy these rules.

9) A number that is rational and is a fraction.

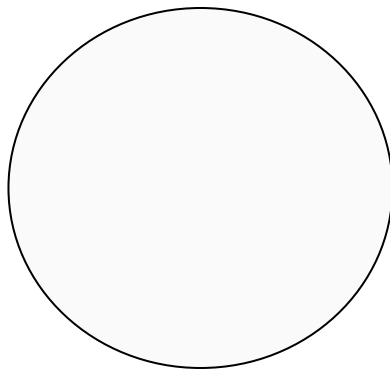
10) A number that is irrational because it is a non-terminating, non-repeating decimal.

11) A number that is rational because it is a terminating decimal.

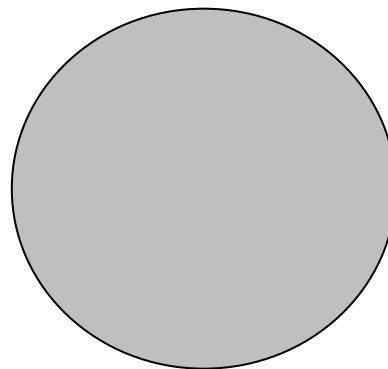
12) A number that is rational because it is a repeating decimal.

Classify each number as rational or irrational. Place the following numbers in the diagram.

Rational



Irrational



$0.\overline{22}$	0	$\sqrt{34}$	0.89...	1	$\sqrt{81}$	45	.5
$\frac{1}{8}$	11.6712...	$\sqrt{16}$	π	$\frac{3}{4}$	$0.\overline{7}$	0.684...	