

Key

$$20/20 = 100$$

Foundations for College Algebra  
Fall 2016  
Quiz #2

SHOW ALL WORK QUIZ!

1. Use the chart below to place a check mark indicating which sets the item on the left is a member of.

	N	W	Z	Q	Q'	R
0.16				✓		✓
$-\sqrt{5}$					✓	✓
$\frac{2}{7}$				✓		✓
-9			✓	✓		✓
0		✓	✓	✓		✓

2. Find the prime factors of 192.  $= 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3 = 2^6 \cdot 3$

$$\begin{array}{l} \textcircled{2} \cdot 96 \\ \quad \uparrow \\ \textcircled{2} \cdot 48 \\ \quad \quad \uparrow \\ \textcircled{2} \cdot 24 \\ \quad \quad \quad \uparrow \\ \textcircled{2} \cdot 12 \\ \quad \quad \quad \quad \uparrow \\ \textcircled{2} \cdot 6 \\ \quad \quad \quad \quad \quad \uparrow \\ \textcircled{2} \cdot 3 \end{array}$$

3. Convert 0.62 to fraction.

$$0.62 = \frac{62}{100} = \frac{31}{50}$$

Consider the below statement and determine whether it is true or false. Write a sentence explaining your answer. In particular, if the statement is false, try to give an example that contradicts the statement. If it is true, explain why?

4. *Some whole numbers are irrational.*

False, because a whole number can always be written as a rational number by putting it over the denominator of "1", and if a number is rational its decimal is either terminating or repeating.