Foundations for College Algebra
Fall 2017
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.

	$\mathbb{N}$	$\mathbb{W}$	$\mathbb{Z}$	$\mathbb{Q}$	$\mathbb{Q}'$	$\mathbb{R}$
2403	✓	✓	✓	✓	✓	✓
$-\pi$	✓	✓	✓	✓	✓	✓
$\dfrac{4}{3}$	✓	✓	✓	✓	✓	✓
$-\sqrt{2}$	✓	✓	✓	✓	✓	✓

2. Identify the *Additive Inverse* in the following expression: $3 - (x - 2) \boxed{- 3}$

$$3 + (-3) = 0$$

3. Covert the following repeating decimal to a fraction: $0.\overline{538}$. Show **all** steps.

$$\text{Let } x = 0.\overline{538}$$
$$1000 \ x = 538.\overline{538}$$
$$x = 0.\overline{538}$$
$$\overline{999 \ x = 538}$$
$$x = \frac{538}{999}$$

4. In the second paragraph of page 3 (the beginning of the section of CORI 1.1) it says, "The set of $\mathbb{N}$ of natural numbers is unbounded;" what is meant by **unbounded**?

That the set N is infinite.