

MA201 Test 1 - 2/10/09

Name: \_\_\_\_\_

Section: \_\_\_\_\_

**Directions:**

Please print your name clearly. This is a 50 minute exam and is worth 15% of your final grade. There are 100 points possible. Calculators may not be used on this exam. Good luck!

<b>Problem</b>	<b>Points possible</b>	<b>Points earned</b>
1	16	
2	10	
3	15	
4	10	
5	8	
6	10	
7	8	
8	8	
9	6	
10	9	
<b>Total</b>	<b>100</b>	

1. Please list the Principles and Standards for School Mathematics of the National Council of Teachers of Mathematics (from the back cover of your book).

(a) (6 pts.) Principles for School Mathematics

(b) (5 pts.) The Content Standards

(c) (5 pts.) The Process Standards

2. Let the natural numbers,  $\mathbb{N}$ , be the universe. Let  $A = \{2, 4, 6, 8, 10, 12, 14, 16, 20\}$  and  $B = \{x|x = 4n\}$ .

(a) (3 pts.) Write  $A$  in set builder notation.

(b) (2 pts.) What is  $A \cap B$ ? (you may write the set in list notation)

(c) (5 pts.) Suppose, for two sets  $C$  and  $D$ , that  $C \subseteq D$ . What is  $C \cup D$ ? Explain using full sentences. You may draw a picture.