Nickname: _____No.___M4/15

Worksheet 1: Sets and Subsets

1. Rewrite the following statements using set notation: (Choose the letter of your answer on the write

1. a belong to B _____
2. b does not belong to A _____
3. A is a subset of B _____
4. b is a member of A _____
5. A is not a subset of B _____

a. $A \not\subseteq B$
b. $a \in B$
c. $A \subseteq B$
d. $A \not\subseteq B$
e. $b \in A$
f. $b \notin A$
g. $A \in B$

2. Write Yes or No , if the following set is a null set.

a. $A = \{x/x \text{ is a letter before } \boldsymbol{a} \text{ in the alphabet}\}$ _____

b. $B = \{x/\ x^2 = 9 \text{ and } 2x = 4\}$ _____

c. $C = \{x/\ x + 9 = 9\}$ _____

3. Let $A = \{1, 3, 5, 7\}$ and

$B = \{\text{odd numbers less than } 10\}$ $B = \{ \qquad \}$

Statements	True or False
a. $A \subset B$	
b. $A \not\subset B$	
c. $A = B$	
d. $B \subset A$	
e. $3 \subset B$	
f. $\emptyset \not\subset A$	

4. Let $A = \{\text{multiples of } 3 \text{ less than } 20\}$, $B = \{\text{multiples of } 3\}$ and $C = \{\text{multiples of } 6\}$.

Write True or False.

Statements	True or False
a. $A \subset B$	
b. $A \not\subset B$	
c. $C \subset A$	
d. $B \subset A$	
e. $C \in A$	
f. $\emptyset \not\subset A$	
g. $12 \in A$	

LIVEWORKSHEETS