

Mathematics

Name _____ Grade: _____ Date: _____

Intersection of Sets

Write T for (True) and F for (False) on the blank spaces

1. The students in your class are a subset of all the students in your school. _____
2. Prime numbers are a subset of composite numbers. _____
3. If $A=\{x,y,z\}$, $B=\{s,t,u\}$ then $A \cap B$ is \emptyset . _____
4. If $n(C) = 4$ and $n(D) = 4$ then $C = D$. _____
5. The set of mothers in the world is finite. _____
6. All equivalent sets are equal. _____
7. If $X=\{a,b,c\}$ and $Y=\{c,d,e\}$ then $X \cup Y = \{a,b,c,d,e\}$. _____
8. Union is the set of members of 2 sets. _____
9. Two sets are disjoint when their intersection is an empty set. _

In the spaces provided place the symbol that will make the relationship true.

=	\leftrightarrow	\cup	\cap	\subseteq	$\not\subseteq$	\in	\notin	\emptyset	...
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- 1) If $A = \{\text{piano, guitar, violin}\}$ and $B = \{\text{guitar, piano, violin}\}$ then B _____ A
- 2) If $R = \{1,3,5\}$ and $S = \{5,6,7\}$ then R _____ $S = \{5\}$.
- 3) If $X = \{\text{denominational churches}\}$ $Y = \{\text{Baptist}\} \therefore Y$ _____ X .
- 4) If $Q = \{2,3,4,5\}$ then 3 _____ Q .
- 5) $W = \{\text{man, woman, child}\}$ and $T = \{\text{leaf, tree, branch}\}$ so W _____ T
- 6) This symbol means it goes on forever _____.
- 7) If $M = \{d,e, f,g\}$ and $N = \{a,b,c,d,e\}$ then M _____ $N = \{a,b,c,d,e,f,g\}$
10. If $Y = \{4,3,2,1\}$ and $Z = \{4, 5,6,7\}$ then 3 _____ Z
11. $W = \{\text{man, woman, child}\}$ and $T = \{\text{leaf, tree, branch}\}$ so $W \cap T$
= _____