

Math 2283 - Introduction to Logic

Quiz #10 - 2017.03.20

Name: _____

Determine which of the following are valid sentential functions. Here, you may assume that R , S , and T are relations, K , L , and M are sets, and x , y , and z are variables representing constants.

1. $x \in R/S$

2. xKy

3. $R \subset S$

4. $K \subseteq L$

5. $x[(R \cap S) \cup T]y$

6. $x \in K \subseteq (L \cup M)$

7. $z \in xR/Sy$

8. $z \subseteq y$

9. $KR'(L \cup M)$

10. $xR \wedge Sy$

11. $xRy \wedge zSy$

12. $xRy \cap zSy$

13. $xR \cup Sy$

14. $x(R \subset S)y$

15. $x \in K \subseteq x \in L$