

Math 2283 - Introduction to Logic

Quiz #8 - 2013.09.18

Name: _____

1. Which of the following sentences are true:

(a) $2+2 = 4$

(b) $"2+2" = 4$

(c) $"2" + "2" = 4$

(d) $"2" + "2" = "4"$

(e) $"2" + "2" = "2+2"$

2. If $P(x)$ is defined to be: x has the property P , state what the following logical sentence means in a simply quantified English sentence:

$$\left[\underset{x}{\forall} \sim P(x) \right] \vee \left[\underset{x}{\exists} P(x) \wedge \underset{z}{\forall} P(z) \rightarrow (z = x) \right]$$