MCS-236 Homework 3

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You are given two statements

(a) "$3 = 9$ whenever $7 > 6$."

(b) "Every boy is small or some girl is big."

and the assumption that "small" means "not big." Do the followings.

1. Write the contrapositive of Statement (a).

2. Write a negation of Statement (a) using "and" but not using "or."

3. Write a conditional statement that is logically equivalent to Statement (b).

Explain in detail how you arrived at each answer.