CSE 103: DISCRETE MATHEMATICS

Chapter 1.1:

QUESTION: 10

 Let p and q be the propositions "The election is decided" "The votes have been counted," respectively. Express each of these compound propositions as an English sentence.

Compound proposition	English sentence
a. ¬p	The election is not decided.
b. p∨q	The election is decided or the votes have been counted.
c. ¬p∧q	The election is not decided and the votes have been counted.
d. q →p	If the votes have been counted, then the election is decided.
e. ¬q→¬p	If the votes have not been counted, then the election is not decided.
f. ¬p→¬q	If the election is not decided, then the votes have not been counted,
g. p↔q	The election is decided only if the votes have been counted,
h. ¬q∨(¬p∧q)	The votes have not been decided or the

	election is not decided and the votes have been counted.