Homework 3
Due Date: January 23

Problem 4. Consider the following argument:

“The government obtains an injunction and the military will be sent into the mills. If the military is not sent into the mills, then the strike is settled. The strike is either settled or looting will begin. Looting does not begin. Therefore, the strike is settled.”

Assuming that the first four statements are true, must we accept the conclusion, that is, is the strike settled? Justify your answer.

Problem 5. Assume $P$, $Q$, and $R$ are statements. Find the truth table for each of the following statements.

(a) $(R \leftrightarrow P) \rightarrow ((\neg P) \lor R)$

(b) $(Q \land R) \rightarrow (P \rightarrow (Q \lor (\neg R)))$

Problem 6. Compute the truth tables for $\neg(P \lor Q)$ and $(\neg P) \land (\neg Q)$. What do you notice about their truth values?