Exercise #5

(範圍: Relations)

1. P. 252: 4.   (10%)

2. P. 252: 12.   (10%)

3. P. 364: 3.   (10%)

4. P. 365: 6 (only for (a) and (c)).   (10%)

5. P. 370: 8.   (10%)

6. P. 371: 14 (only for (a), (b), (d), (f)).   (20%)

7. P. 66: 2.   (10%)

8. P. 66: 4.   (10%)

9. Prove that if $3 \mid n^2$, then $3 \mid n$, where n is a positive integer, by the methods of
   (a) $p \rightarrow q \Leftrightarrow \neg q \rightarrow \neg p$;   (5%)
   (b) contradiction.   (5%)