**Worksheet Exercise 3.7.C.**

**Syllogistic Deductions**

**Part C.** Give deductions for the following arguments, use as many steps as you need.

(1) 1. no K are non-M
    2. some A are G
    3. no non-S are G
    4. all S are K \(\vdash\) some A are M
    
    5. ____________________  ________
    6. ____________________  ________
    7. ____________________  ________
    8. ____________________  ________
    9. ____________________  ________
    10. _______ ________
    11. _______ ________
    12. _______ ________

(2) 1. not all Q are B
    2. all W are K
    3. all K are B
    4. not some non-W are U \(\vdash\) some Q are non-U

    5. ____________________  ________
    6. ____________________  ________
    7. ____________________  ________
    8. ____________________  ________
    9. ____________________  ________
    10. _______ ________
    11. _______ ________
    12. _______ ________

(3) 1. \(b\) is non-M
    2. all S are M
    3. all R are E
    4. no E are non-S \(\vdash\) not all non-M are R

    5. ____________________  ________
    6. ____________________  ________
    7. ____________________  ________
    8. ____________________  ________
    9. ____________________  ________
    10. _______ ________
    11. _______ ________
    12. _______ ________
    13. _______ ________
    14. _______ ________
(4) 1. all D are non-Q
2. all D are S
3. c is D
4. all non-Q are M
5. no S are non-A ⊴: not no A are M

(5) 1. no A are B
2. all C are B
3. no U are M
4. all non-A are M
5. no non-U are K ⊴: no C are K

(6) 1. d is K
2. not some P are Q
3. all B are Q
4. no K are non-B
5. all non-M are P ⊴: some K is M