Symbolization Exercises
Symbolize the following sentences into predicate logic notation, using the interpretation given below.

D: people
A: ι is an astronaut
C: ι is a carpenter
P: ι is a plumber
U: ι is a used car salesperson
a: Alfred
b: Betty

1. Alfred is a carpenter, but Betty is not.
2. Betty, but not Alfred, is a plumber.
3. Not both Alfred and Betty are plumbers.
4. If Alfred is a carpenter, then he is not a plumber.
5. Alfred is a carpenter if and only if Betty is not.
6. Neither Alfred nor Betty is an astronaut.
7. Some carpenter is a plumber.
8. Some carpenter is not a plumber.
9. Every carpenter is a plumber.
10. No carpenter is a plumber.

Exercises 6-5
4, 6, 10, 12, 16

Exercises 6-6
2, 6, 8, 12

Exercises 6-7
2, 8, 10