Sherlock Syllogisms 1

A syllogism, from the Greek words for conclusion and inference, is a logic puzzle where you draw a conclusion from particular kinds of purported facts you are given and those facts alone. Syllogisms are an important basis of logical thinking. Thinking clearly starts with understanding the 24 syllogisms. Much flawed reasoning involves people believing faulty syllogisms are true. Getting software right can involve this kind of clear thinking about the consequences of the code. Given the following purported facts, which statement can be concluded? The game is afoot!

i)   **All gems in the game are expensive in-game purchases.**
        All rubies in the game are gems.

Therefore which of the following can we conclude?

a.   Some rubies in the game are expensive in-game purchases.
b.   All rubies in the game are expensive in-game purchases.
c.   Some gems in the game are expensive in-game purchases.
d.   None of the above.

ii)   **No robots are evil.**
        All mobile phones are robots.

Therefore which of the following can we conclude?

a.   All mobile phones are evil.
b.   All robots are mobile phones.
c.   Some mobile phones are evil.
d.   None of the above.

iii)   **All bugs are poor computer software.**
        Some rounding errors are bugs.

Therefore which of the following can we conclude?

a.   All rounding errors are poor computer software.
b.   Some rounding errors are poor computer software.
c.   Some rounding errors are false.
d.   None of the above.

iv)   **All educational things are useful.**
        Some websites are not useful.

Therefore which of the following can we conclude?

a.   Some websites are not educational.
b.   All websites are educational.
c.   All educational things are not websites.
d.   None of the above.