

## 1.4 Practice Questions: Symbolization

1. "Fred changed the oil in my car yesterday."

P = "Fred changed the oil in my car yesterday." (This is already a simple statement.)

2. "Fred changed the oil in my car yesterday for free. He is such a nice guy."

P = "Fred changed the oil in my car yesterday for free."

Q = "Fred is a nice guy."

Note: we may have a dispute about whether or not P is a simple statement in this case. Currently, we have a single subject ("Fred") and a single predicate ("changed the oil in my car yesterday for free"). We may wish to break that predicate into smaller pieces, resulting in the following translation:

P = "Fred changed the oil in my car yesterday."

Q = "Fred changed the oil in my car for free."

R = "Fred is a nice guy."

We only need to become this precise in our translation if the argument calls for it. Knowing whether or not the argument calls for it depends on the structure of the argument, which we will be in a position to understand after learning about logical operators.

3. "Formal logic is so dull and pointless!"

P = "Formal logic is so dull."

R = "Formal logic is so pointless."

4. "Samantha really likes the original *Total Recall*, but she hates the remake."

P = "Samantha really likes the original *Total Recall*."

Q = "Samantha hates the remake of *Total Recall*."

5. "I don't feel so well today. I was around Jack yesterday, and he was ill, so I must have picked up whatever he had."

P = "I don't feel so well today."

Q = "I was around Jack yesterday"

R = "Jack was ill yesterday."

S = "I must have picked up the illness Jack had."

6. "Jennifer went to Italy last summer. While she was there, she saw the Colosseum and the Vatican. She also ate a lot of pasta."

P = "Jennifer went to Italy last summer."

Q = "Jennifer saw the Colosseum last summer."

R = "Jennifer saw the Vatican last summer."

S = "Jennifer ate a lot of pasta in Italy last summer."

7. "The fear of flying is completely irrational. You are far more likely to die on the way to the airport than while on the flight itself."

P = "The fear of flying is completely irrational."

Q = "People are far more likely to die on the way to the airport than while on the flight itself."

(Note: Q contains a comparison of probabilities. Only as a complete unit can the comparison be true or false. One thing must be more likely *than some other thing*; it cannot simply be "more likely.")

8. "My cat Whiskers is so nice to everyone...although he does kill birds."

P = "My cat Whiskers is nice to everyone."

Q = "My cat Whiskers kills birds."

9. "I will have salad instead of tacos for dinner."

P = "I will have salad for dinner."

Q = "I will not have tacos for dinner."

10. "May I have gluten-free crust for my pizza?"

This is a trick question! This example is a question, not a statement, so it cannot be true or false. Statement logic only cares about statements, so we do not symbolize questions.