

Q1:

"All basketball players are tall and some basketball players are not thin"

Predicate Calculus:

$\forall X$ basketball-players $(X, \text{tall}) \wedge$

$\exists X$ basketball-players (X)

Propositional Calculus:

P : "All basketball players are tall"

Q : "and some basketball players are not thin"

$P \wedge Q$

Q2:

"If it doesn't rain on Monday, Tom will not go to the hill and will play skiing"

Propositional Calculus:

P: "If it doesn't rain on Monday"

Q: "Tom will not go to the hill"

R: "and will play skiing"

$$P \Rightarrow Q \wedge R$$

Predicate Calculus:

$\neg \text{wather}(\text{rain, monday}) \Rightarrow \neg \text{go}(\text{tom, hill}) \wedge$
 $\text{skiing}(\text{play})$