Conditional Logic

English to A→B Translations

I. Easy

1. If M is selected N must be selected

2. M is true if D is true

3. At least one of A or B must be selected

4. C and D cannot both happen

5. If B is selected C also is

6. Whenever O is selected Q can't be

7. S is selected when R isn't selected

8. E occurs whenver D does not

9. L must be true anytime G is

10. Every Z is P

11. No E is H

Conditional Logic
English to A→B Translations

I. Easy - Answer Key

1. If M is selected N must be selected — $M \rightarrow N$

2. M is true if D is true — $D \rightarrow M$

3. Either A or B must be selected — $\not{A} \rightarrow B$

4. C and D cannot both happen — $C \rightarrow \not{D}$

5. If B is selected C also is — $B \rightarrow C$

6. Whenever O is selected Q can't be — $O \rightarrow \not{Q}$

7. S is selected when R isn't selected — $\not{R} \rightarrow S$

8. E occurs whenver D does not — $\not{D} \rightarrow E$

9. L must be true anytime G is — $G \rightarrow L$

10. Every Z is P — $Z \rightarrow P$

11. No E is H — $E \rightarrow \not{H}$

Conditional Logic
English to A→B Translations

II. Medium

1. If R is then L and B are

2. H is selected only if G is not

3. D can't happen unless C happens

4. Either E or F must be true, but not both

5. Unless I is chosen, J must be

6. K must be true unless L is not

7. L must be selected except if J is selected

8. Only if X is selected can Y be

9. Q can't be in unless T and S are

10. The only time V can be true is if A is

11. Every N is R but not P

12. H is required for G

13. Only W is T

Conditional Logic
English to A→B Translations

II. Medium - Answer Key

1. If R is then L and B are — $R \rightarrow L + B$

2. H is selected only if G is not — $H \rightarrow \not{G}$

3. D can't happen unless C happens — $\not{C} \rightarrow \not{D}$

4. Either E or F must be true, but not both — $\not{E} \rightarrow F \quad E \rightarrow \not{F}$

5. Unless I is chosen, J must be — $\not{I} \rightarrow J$

6. K must be true unless L is not — $L \rightarrow K$

7. L must be selected except if J is selected — $\not{J} \rightarrow L$

8. Only if X is selected can Y be — $Y \rightarrow X$

9. Q can't be in unless T and S are — $\not{T}$ or $\not{S} \rightarrow \not{Q}$

10. The only time V can be true is if A is — $V \rightarrow A$

11. Every N is R but not P — $N \rightarrow R + \not{P}$

12. H is required for G — $G \rightarrow H$

13. Only W is T — $T \rightarrow W$

Conditional Logic
English to A→B Translations

III. Hard

1. Neither C nor R can be true unless E or D are

2. Q must be selected, but not if P is

3. Unless T is selected V and W can't be

4. Z and Y must both be either in or out

5. Neither H nor I can be in except if W or Q are

6. D is not selected if and only if O is

7. R can't be selected whenever G is and B isn't

8. Y can occur only if F doesn't or T does

9. If and only if G isn't selected, D is selected

10. Neither K nor H is selected except if F is

11. All Fs that are N are also G

12. Every O except those that B are W

13. Whenever Y occurs, L does too, unless E does

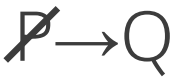
14. Only H are K except for J

Conditional Logic
English to A→B Translations

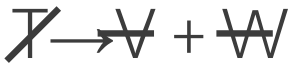
III. Hard - Answer Key

1. Neither C nor R can be true unless E or D are

2. Q must be selected, but not if P is



3. Unless T is selected V and W can't be



4. Z and Y must both be either in or out

5. Neither H nor I can be in except if W or Q are

6. D is not selected if and only if O is

7. R can't be selected whenever G is and B isn't

8. Y can occur only if F doesn't or T does

9. If and only if G isn't selected, D is selected

10. Neither K nor H is selected except if F is

11. All Fs that are N are also G

12. Every O except those that B are W

13. Whenever Y occurs, L does too, unless E does

14. Only H are K except for J