

Worksheet Exercise 2.9.A.

Name _____

Deductions, full blast

Class _____ Date _____

Part A. Give deductions for the following arguments, use as many blanks as you need. These are easy.

(1)

- | | |
|---------------|--------------------------|
| 1. $\sim A$ | Prem |
| 2. $\sim B$ | Prem |
| 3. $B \vee C$ | Prem |
| 4. $A \vee D$ | Prem $\therefore C \& D$ |

- | | |
|----------|-------|
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |

(2)

- | | |
|-----------------------|-------------------------------|
| 1. $\sim A \& \sim B$ | Prem |
| 2. $B \vee C$ | Prem $\therefore C \& \sim A$ |

- | | |
|----------|-------|
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |

(3)

- | | |
|----------------------------|------------------------------------|
| 1. $A \supset B$ | Prem |
| 2. $\sim P \supset \sim T$ | Prem |
| 3. $B \supset \sim P$ | Prem $\therefore A \supset \sim T$ |

- | | |
|----------|-------|
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |

(4)

- | | |
|--------------------|--------------------------|
| 1. $G \vee \sim H$ | Prem |
| 2. $\sim G$ | Prem |
| 3. $I \supset H$ | Prem $\therefore \sim I$ |

- | | |
|----------|-------|
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |

(5)

- | | |
|-----------------------------|---------------------|
| 1. $(A \& B) \vee (Q \& R)$ | Prem |
| 2. $\sim Q \vee \sim R$ | Prem $\therefore B$ |

- | | |
|----------|-------|
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |

(6)

- | | |
|-------------------------|---|
| 1. $C \supset (A \& S)$ | Prem $\therefore \sim S \supset \sim C$ |
|-------------------------|---|

- | | |
|----------|-------|
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |

(7)

- | | |
|----------------------|------------------------------------|
| 1. $M \equiv \sim O$ | Prem $\therefore \sim M \supset O$ |
|----------------------|------------------------------------|

- | | |
|----------|-------|
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |

(8)

- | | |
|---------------------------|--------------------------|
| 1. $F \supset (G \vee A)$ | Prem |
| 2. $\sim G$ | Prem |
| 3. $\sim A$ | Prem $\therefore \sim F$ |

- | | |
|----------|-------|
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |