1. Translate the following argument into symbols and then use a truth table to decide if the argument is valid.

> If Billy Bob uses Sparkles brand toothpaste to brush his teeth, his teeth will become whiter.
> Billy Bob's became whiter.
> $\therefore$ Billy Bob used Sparkles brand toothpaste to brush his teeth.

A. Invalid

B. Valid

2. Decide if the following argument is valid by using the given forms of valid arguments and fallacies.

$$p \lor q$$
$$q$$
$$\therefore \sim p$$

A. This argument is invalid by the Fallacy of the "Inclusive OR."

B. This argument is invalid by the Fallacy of the Converse.

C. This argument is valid by the Law of Detachment.

D. This argument is valid by the Law of Contraposition.

E. This argument is invalid by the Fallacy of the Inverse.

F. This argument is valid by the Law of Disjunctive Syllogism.

G. This argument is valid by the Law of Syllogism (a.k.a., The Law of Transitivity).

3. Use a truth table to decide if the following argument is valid.

$$p \leftrightarrow \sim q$$
$$\underline{p \wedge \sim q}$$
$$\therefore p \vee q$$

A. Invalid

B. Valid

4. Translate the following argument into symbols and then use a truth table to decide if the argument is valid.

I need to take a course in argumentation or civil rights.
I couldn't get into the class on civil rights.
$\therefore$ I'm taking the argumentation class.

A. Invalid

B. Valid

5. Decide if the following argument is valid by using the given forms of valid arguments and fallacies.

$$\sim p \vee q$$
$$\sim q$$
$$\therefore \sim p$$

A. This argument is valid by the Law of Detachment.

B. This argument is valid by the Law of Syllogism (a.k.a., The Law of Transitivity).

C. This argument is valid by the Law of Disjunctive Syllogism.

D. This argument is invalid by the Fallacy of the Inverse.

E. This argument is valid by the Law of Contraposition.

F. This argument is invalid by the Fallacy of the Converse.

G. This argument is invalid by the Fallacy of the "Inclusive OR."

6. Use a truth table to decide if the following argument is valid.

$$p \leftrightarrow q$$
$$\sim q$$
$$\therefore \sim p$$

A. Valid

B. Invalid

7. Oscar Wilde once said, "Few parents nowadays pay any regard fo what their children say to them. The old-fashioned respect for the young is dying out." Translating this into a simpler form, Wilde's argument may be represented as written below:

> If parents respected their children, then parents would listen to them.
> Parents do not listen to their children.
> ∴ Parents do not respect their children.

Decide if the above argument is valid by using the given forms of valid arguments and fallacies.

A. This argument is valid by the Law of Disjunctive Syllogism.

B. This argument is invalid by the Fallacy of the Converse.

C. This argument is invalid by the Fallacy of the Inverse.

D. This argument is valid by the Law of Syllogism (a.k.a., The Law of Transitivity).

E. This argument is valid by the Law of Contraposition.

F. This argument is valid by the Law of Detachment.

8. Winston Churchill once said, "If you have an important point to make, don't try to be subtle of clever. Use a pile driver. Hit the point once. Then come back and hit it again. Then a third time−a tremendous wack!" Translating this into a simpler form, Churchill's argument may be represented as written below:

> If you have an important point to make, then you shouldn't be subtle or clever.
> You're not being subtle or clever.
> ∴ You will make your point.

Decide if the above argument is valid by using the given forms of valid arguments and fallacies.

A. This argument is invalid by the Fallacy of the Converse.

B. This argument is valid by the Law of Detachment.

C. This argument is valid by the Law of Disjunctive Syllogism.

D. This argument is invalid by the Fallacy of the "Inclusive OR."

E. This argument is valid by the Law of Syllogism (a.k.a., The Law of Transitivity).

F. This argument is invalid by the Fallacy of the Inverse.

G. This argument is valid by the Law of Contraposition.