Additional review logic
MGF 1106

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Express the symbolic statement ~p in words.

1) p: Vitamin C helps the immune system. 1) _____
A) Vitamin C does not help the immune system.
B) It is true that Vitamin C helps the immune system.
C) Vitamin A helps the immune system.
D) Vitamin C may help the immune system.

2) p: Some athletes are musicians. 2) _____
A) No athlete is a musician.
B) All athletes are musicians.
C) Some athletes are not musicians.
D) Not all athletes are musicians.

Construct a truth table for the statement.

3) $\sim q \vee (\sim p \vee q)$ 3) _____

A)

q	p	$\sim q \vee (\sim p \vee q)$
T	T	F
T	F	F
F	T	T
F	F	T

B)

q	p	$\sim q \vee (\sim p \vee q)$
T	T	F
T	F	T
F	T	T
F	F	T

C)

q	p	$\sim q \vee (\sim p \vee q)$
T	T	T
T	F	F
F	T	T
F	F	T

D)

q	p	$\sim q \vee (\sim p \vee q)$
T	T	T
T	F	T
F	T	T
F	F	T

Let p represent a true statement and let q represent a false statement. Find the truth value of the given compound statement.

4) $p \wedge q$ 4) _____
A) True
B) False

5) $\sim[(\sim p \wedge \sim q) \vee \sim q]$ 5) _____
A) True
B) False

Let p represent a true statement, while q and r represent false statements. Find the truth value of the compound statement.

6) $\sim(\sim p \wedge \sim q) \vee (\sim r \vee \sim p)$ 6) _____
A) True
B) False

7) $\sim(p \wedge q) \wedge (r \vee \sim q)$ 7) _____
A) True
B) False