# **Boolean Algebra Pretest II**

# **SIMPLIFY**

1. 
$$(D+E)(D+\overline{E})$$

2. 
$$(A+\overline{B})(\overline{A}+B)$$

3. 
$$D + \overline{HI}JHQI$$

4. 
$$\overline{B}(E+B)$$

5. 
$$(F+G)(F+\overline{G})$$

6. 
$$C(DA + DWAL + LAND)$$

#### **FACTOR COMPLETELY**

7. 
$$IT + \overline{IT}Y$$

8. 
$$IN + OUT$$

9. 
$$\overline{C}X + \overline{C}U + J\overline{C}$$

## **DeMORGANIZE**

10. 
$$\overline{\overline{A} + \overline{B}}$$

11. 
$$\overline{P}\overline{QR}$$

12. 
$$\overline{XY} + \overline{X+Y}$$

## **SIMPLIFY COMPLETELY**

13. 
$$\overline{(C+Q\overline{U}E)\overline{Z}}$$

14. 
$$\overline{(E+\overline{E})(\overline{FG}+G+\overline{F})}$$

15. 
$$MN + MP + M\overline{N} + \overline{P+Q} + \overline{\overline{PQ}}$$

16. 
$$\overline{MN}(P+Q)(\overline{R+S})$$

17. 
$$(A + B\overline{Y}E)(N + B\overline{Y}E)(D + B\overline{Y}E)$$

18. 
$$\overline{(A+\overline{B}+\overline{C})}(\overline{A+\overline{C}})$$