Number Properties

Name _____

Date _____ Period _____

**A.** Closure for Addition
**B.** Commutative for Addition
**C.** Associative for Addition
**D.** Identity for Addition
**E.** Inverse for Addition
**F.** Closure for Multiplication
**G.** Commutative for Multiplication
**H.** Associative for Multiplication
**I.** Identity for Multiplication
**J.** Inverse for Multiplication
**K.** Distributive for Multiplication over Addition

Use the appropriate letter to name the property illustrated. (Assume that variables represent real numbers.)

**1.** $8 \cdot 1 = 8$ *I*

**2.** $7 \cdot 3 = 3 \cdot 7$ ____

**3.** $(9 + 4) + 6 = 9 + (4 + 6)$ ____

**4.** $a(b + c) = ab + ac$ ____

**5.** $8(c + d) = 8(d + c)$ ____

**6.** $mn + mt = m(n + t)$ ____

**7.** $8(c + d) = (c + d)8$ ____

**8.** $4 + (-4) = 0$ ____

**9.** $4 + 0 = 4$ ____

**10.** $(a + c)$ is a real number ____

**11.** $\left(\frac{1}{6}\right)(6) = 1$ ____

**12.** $x \cdot 1 = x$ ____

**13.** $4 + 7 + x = 7 + 4 + x$ ____

**14.** $(4 + 7) + x = 4 + (7 + x)$ ____

**15.** $3 + a = a + 3$ ____

**16.** $xyz = yxz$ ____

**17.** $ab$ is a real number ____

**18.** $35 + 0 = 35$ ____

**19.** $2 \cdot 5 + 2 \cdot 9 = 2(5 + 9)$ ____

**20.** $(a + b) \cdot 1 = a + b$ ____

**21.** $(a + b)7 = 7(a + b)$ ____

**22.** $6 + (-6) = 0$ ____

Number Properties

Name _____

Date _____ Period _____

**A.** Closure for Addition
**B.** Commutative for Addition
**C.** Associative for Addition
**D.** Identity for Addition
**E.** Inverse for Addition
**F.** Closure for Multiplication
**G.** Commutative for Multiplication
**H.** Associative for Multiplication
**I.** Identity for Multiplication
**J.** Inverse for Multiplication
**K.** Distributive for Multiplication over Addition

Use the appropriate letter to name the property illustrated. (Assume that variables represent real numbers.)

**1.** $3 + (5 + 7) = (3 + 5) + 7$ C

**2.** $16 + 27 = 27 + 16$ ____

**3.** $73 \cdot 86 = 86 \cdot 73$ ____

**4.** $12 + 0 = 12$ ____

**5.** $461 \cdot 1 = 461$ ____

**6.** $326 \cdot 1 = 1 \cdot 326$ ____

**7.** $x + (y + 5) = (x + y) + 5$ ____

**8.** $73 \cdot 1 = 73$ ____

**9.** $(m + n)$ is a real number ____

**10.** $a - 3 + b = a + b - 3$ ____

**11.** $x + (-x) = 0$ ____

**12.** $mn$ is a real number ____

**13.** $73 \cdot 2 = 2 \cdot 73$ ____

**14.** $b + 3 = 3 + b$ ____

**15.** $4(7 + 3) = 4 \cdot 7 + 4 \cdot 3$ ____

**16.** $5(7 + 2) = (7 + 2)5$ ____

**17.** $7 = 7 + 0$ ____

**18.** $5(7 + 2) = 5 \cdot 7 + 5 \cdot 2$ ____

**19.** $13 \cdot 4 \cdot 10 = 13 \cdot 10 \cdot 4$ ____

**20.** $8 + a + 0 = 8 + a$ ____

**21.** $(27 + e) + f = (e + 27) + f$ ____

**22.** $7\left(\frac{1}{7}\right) = 1$ ____