

# Test, Form 1A

Write the letter for the correct answer in the blank at the right of each question.

For Exercises 1–3, which expression represents the phrase?

1. nine increased by two  
 A.  $\frac{9}{2}$       B.  $9 \cdot 2$       C.  $9 + 2$       D.  $9 - 2$       1.     **C**
2. four times a number  
 F.  $4 \cdot 2$       G.  $4x$       H.  $4 + 2$       J.  $y + 4$       2.     **G**
3.  $r$  decreased by 7  
 A.  $r - 7$       B.  $7r$       C.  $r + 7$       D.  $7 - r$       3.     **A**

For Exercises 4–9, what is the value of each expression?

4.  $2 \cdot 4 + 3$   
 F. 24      G. 20      H. 11      J. 9      4.     **H**
5.  $6 + 8 - 2$   
 A. 7      B. 10      C. 11      D. 12      5.     **D**
6.  $9(2 + 1) - 12$   
 F. 30      G. 16      H. 15      J. 5      6.     **H**
7.  $a - b$ , if  $a = 15$  and  $b = 9$   
 A. 6      B. 7      C. 24      D. 25      7.     **A**
8.  $k + p - 16$ , if  $k = 12$  and  $p = 8$   
 F. 4      G. 8      H. 12      J. 16      8.     **F**
9.  $u + 4v$ , if  $u = 9$  and  $v = 4$   
 A. 17      B. 18      C. 25      D. 40      9.     **C**

For Exercises 10 and 11, what property supports each statement?

10.  $(5 + 3) + 7 = 5 + (3 + 7)$   
 F. Associative (+)      H. Commutative (+)  
 G. Identity (+)      J. Substitution      10.     **F**
11.  $4 \cdot 1 = 4$   
 A. Associative ( $\times$ )      C. Commutative ( $\times$ )  
 B. Identity ( $\times$ )      D. Substitution      11.     **B**

For Exercises 12 and 13, which expressions are equivalent?

12.  $8 + (n + 7)$   
 F.  $7n + 8$       G.  $8n + 7$       H.  $n - 1$       J.  $n + 15$       12.     **J**
13.  $9 \cdot (7 \cdot m)$   
 A.  $16 + m$       B.  $16m$       C.  $7m + 9$       D.  $63m$       13.     **D**

