

**Equivalent Expressions****Unit Test: D**

- Which number is the exponent in  $\left(\frac{4}{5}\right)^3$ ?
  - 3
  - 4
  - 5
- Which expression is the same as  $7 \times 7 \times 7$ ?
  - $7 \times 3$
  - $2^7$
  - $7^3$
- Which of the following shows the prime factorization of 20?
  - $2 \times 2 \times 5$
  - $2 \times 10$
  - $4 \times 5$
- Which number has only two factors?
  - 6
  - 11
  - 15
- What should you do first to simplify  $8 + (2 \times 5)$ ?
  - add
  - subtract
  - multiply
- Simplify the expression below.  
 $4 \times (2 + 1)$ 
  - 2
  - 9
  - 12
- Which of the following is the same as 4 plus  $x$ ?
  - $\frac{4}{x}$
  - $4 + x$
  - $4 - x$
- Which phrase means the same as  $5 \times w$ ?
  - 5 times  $w$
  - 5 divided by  $w$
  - $w$  plus 5
- 10 towels are divided evenly into  $p$  piles. Which expression shows how many towels are in each pile?
  - $p - 10$
  - $10 \times p$
  - $\frac{10}{p}$
- Evaluate  $5n$  for  $n = 2$ .
  - 2
  - 5
  - 10
- Tickets cost \$9 each. How much are 5 tickets?
  - \$5
  - \$9
  - \$45
- Which expression is the same as  $(2 \times 7) \times 3$ ?
  - $2 \times (7 \times 3)$
  - $2 - (7 + 3)$
  - $2 \div (7 - 3)$
- Which expression is the same as  $5a + b + 0$ ?
  - $5a + b$
  - $a + 0$
  - $(a + b)^0$

**Equivalent Expressions**

14. Two students sit in the first row. In the second row, 2 students sit behind each of those students. How many students sit in the second row?  
\_\_\_\_\_
15. Write  $5 \times 5$  using exponents.  
\_\_\_\_\_
16. Find the prime factorization of 13.  
\_\_\_\_\_
17. List all the factors of 18.  
\_\_\_\_\_
18. What should you do first when you simplify the expression below?  
 $(5 + 4) \times 3$   
\_\_\_\_\_
19. Simplify  $2 + 3^2$ .  
\_\_\_\_\_
20. Complete the expression so it means the same as 50 take away  $b$ .  
 $50 -$  \_\_\_\_\_
21. Complete the phrase so it means the same as  $\frac{x}{4}$ .  
 $x$  divided by \_\_\_\_\_
22. There are 20 students in a club. Next year,  $x$  number of students will join. Complete the expression to show how many students will be in the club next year.  
\_\_\_\_\_ +  $x$
23. What is  $y \times 2$  when  $y = 4$ ?  
\_\_\_\_\_
24. What is  $\frac{1}{2}(f - 10)$  when  $f = 16$ ?  
\_\_\_\_\_
25. Write an equivalent expression for the one below.  
 $2 + (x + 8) =$  \_\_\_\_\_
26. Simplify  $4y + 2y + 1$ .  
\_\_\_\_\_