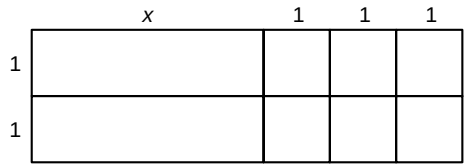
Practice 2.1

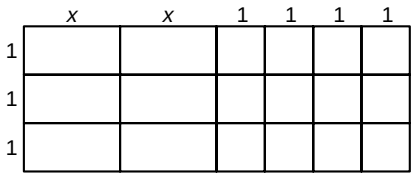
Name _____

In Exercises 1 and 2, write the dimensions of the rectangle and an expression for its area. Then use the Distributive Property to rewrite the expression.

1.



2.



In Exercises 3 and 4, use the Distributive Property to write an equivalent expression. Illustrate your result with an algebraic tile sketch.

3. $3(x + 1)$

4. $5(4x + 2)$

In Exercises 5–16, use the Distributive Property to rewrite the expression.

5. $2(3 + 5)$

6. $12(4 + 7)$

7. $3(x + 2)$

8. $15(y + 4)$

9. $4(z + 3)$

10. $8(2 + p)$

11. $x(y + 3)$

12. $a(c + 4)$

13. $2(x + y + z)$

14. $z(a + 4 + b)$

15. $f(g + 3 + h)$

16. $10(2 + y + z)$

In Exercises 17–19, use a calculator to evaluate the expression two ways.

17. $4(2.5 + 5.2)$

18. $12(6.25 + 7.01)$

19. $575(10.2 + 25.02)$

20. You have taken two part-time summer jobs. One pays \$56 per week and the other \$22.50 per week.

a. Write a verbal model that represents how much you earn over sixteen weeks of summer vacation.

b. Use the model in Part **a** to determine how much you earn during summer vacation.

21. You want to buy a new mountain bike, a CD player and a pair of in-line skates. The monthly payments are \$26.50, \$21.25 and \$17.50 respectively.

a. Write a verbal model that represents the total amount you pay for all three in one year.

b. Use the model in Part **a** to determine the amount you pay in one year.