Name _____ Date _____

3.4 Practice B

Use the Distributive Property and mental math to find the product.

1. 6×24 *144*

2. 7×89 *623*

3. 4×99 *396*

Use the Distributive Property to find the product.

4. $\dfrac{3}{7} \times 5\dfrac{1}{2}$ *$2\dfrac{5}{14}$*

5. $\dfrac{5}{12} \times 4\dfrac{3}{10}$ *$1\dfrac{19}{24}$*

6. $\dfrac{3}{8} \times 3\dfrac{1}{6}$ *$1\dfrac{3}{16}$*

Use the Distributive Property to simplify the expression.

7. $8(a + 6)$ *$8a + 48$*

8. $7(p - 5)$ *$7p - 35$*

9. $10(9 + 2x)$ *$90 + 20x$*

10. $12(3f - k)$ *$36f - 12k$*

11. $6(2 + a + 9)$ *$6a + 66$*

12. $9(x + y + 5)$ *$9x + 9y + 45$*

13. Describe and correct the error in rewriting the expression.

$$\boxed{\quad X \quad 6(x + 7) = 6x + 13 \quad}$$

$6x + 42$

14. A restaurant uses c cups of flour for baking rolls and 12 cups of flour for baking pies each day. Use the Distributive Property to write and simplify an expression for how much flour the restaurant uses in seven days.

$7c + 84$

15. You are y years old. Your sister is 3 years older than you. Your uncle is 4 times older than your sister. Write and simplify an expression that represents your uncle's age.

$4y + 12$

Simplify the expression.

16. $4 + 3(x + 5)$ *$3x + 19$*

17. $8(t + 5) + 15$ *$8t + 55$*

18. $4(y + 11) - 10$ *$4y + 34$*

19. $2w + 3 + 5w - 1$ *$7w + 2$*

20. $3.2(d + 1.7)$ *$3.2d + 5.44$*

21. $\dfrac{2}{3}\left(x - \dfrac{5}{6}\right) + 4x$ *$4\dfrac{2}{3}x - \dfrac{5}{9}$*

Find the value of x that makes the expressions equivalent.

22. $3(x - 7); 33 - 21$ *$x = 11$*

23. $5(x + 4); 15 + 20$ *$x = 3$*

24. Add one set of parentheses to the expression
$8 \bullet x + 10 + 2x + 4 \bullet x + 8 - 6$ so that it is equivalent to $2(7x + 18)$.

not on test