

Unit 4 Objective 3 Remediation

Use Distributive Property to combine like terms

No calculators allowed!!!!

Like terms- terms that have the same variable with the same exponent.

Example 1:

$$\begin{aligned} 3x(-5x - 1) &= 3x \cdot (-5x) - 3x(1) \\ &= -15x^2 - 3x \end{aligned}$$

Example 2:

Rewrite the expression using the Distributive Property.

$$\begin{aligned} 14f - 28 &= ? \quad \text{divide each term by 14} \\ &\quad \text{to work backwards} \\ &= 14(f - 2) \end{aligned}$$

Use the Distributive Property to rewrite each expression.

1. $9xy - 21xyz$ _____

2. $rs + rq$ _____

3. $xy - wy$ _____

4. $4pq + pr$ _____

5. $3de - 15df$ _____

6. $35st + 20rs$ _____

Simplify the following expressions.

7. $3(3x - 2)$

8. $2y(4y - 2)$

9. $-3(3 - 2c)$

10. $2(1 - d)$

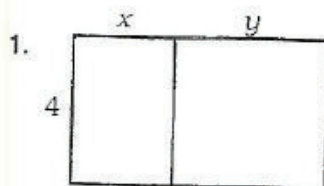
11. $3(7r + 2s)$

12. $6(9k + 2j)$

What Is the World's Longest Punctuation Mark?

For each exercise, write the letter of the answer in the box containing the exercise number.

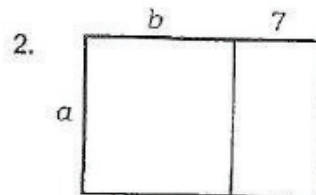
In Exercises 1-2, circle the expression that does *not* represent the area of the outside (largest) rectangle. Write its letter in the corresponding numbered box.



S. $4(x + y)$

K. $4x + 4y$

T. $4 + xy$



H. $ab + 7$

R. $a(b + 7)$

A. $ab + 7a$

In Exercises 3-22, use the distributive property to complete each statement.

3. $9(a + b) = 9a + \underline{\hspace{2cm}}$
4. $3(n + 7) = \underline{\hspace{2cm}} + 21$
5. $2(15 + q) = \underline{\hspace{2cm}} + 2q$
6. $a(b + 8) = ab + \underline{\hspace{2cm}}$
7. $x(x + 5) = \underline{\hspace{2cm}} + 5x$
8. $16(y + 3) = 16y + \underline{\hspace{2cm}}$
9. $e(s + t) = es + \underline{\hspace{2cm}}$
10. $7(p + q + 4) = 7p + 7q + \underline{\hspace{2cm}}$
11. $a(b + c + 11) = \underline{\hspace{2cm}} + ac + 11a$
12. $k(8 + 3 + k) = 8k + 3k + \underline{\hspace{2cm}}$
13. $7x + 7y = 7(x + \underline{\hspace{2cm}})$
14. $3m + 3n = 3(\underline{\hspace{2cm}} + n)$
15. $8a + 8b = \underline{\hspace{2cm}}(a + b)$
16. $ax + ay = \underline{\hspace{2cm}}(x + y)$
17. $nt + 4n = n(t + \underline{\hspace{2cm}})$
18. $2d + 12 = 2(\underline{\hspace{2cm}} + 6)$
19. $5e + 35 = 5(e + \underline{\hspace{2cm}})$
20. $x^2 + 9x = x(\underline{\hspace{2cm}} + 9)$
21. $4p + 4q + 80 = 4(p + q + \underline{\hspace{2cm}})$
22. $kw + wy + w^2 = w(k + y + \underline{\hspace{2cm}})$