

Use the distributive property to determine a solution for each question.

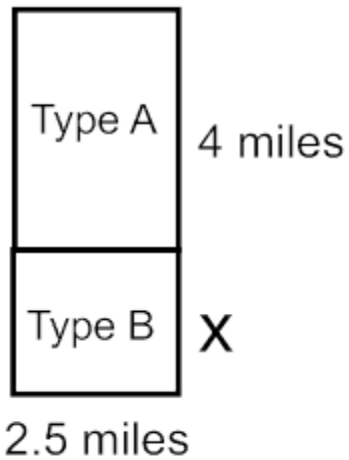
1. Select a box to match each expression on the left to the equivalent expression across the top.

| | $54 + 12$ | $36 + 15$ | $54 + 8$ | $32 + 12$ |
|-------------|-----------|-----------|----------|-----------|
| $4(8 + 3)$ | | | | |
| $6(9 + 2)$ | | | | |
| $3(12 + 5)$ | | | | |

2. Create an expression that is equivalent to $4(2n + 3 + 5n)$ without parentheses.
3. Consider this expression $3(10a + 3b)$. Create an expression that is equivalent to this expression.
4. Select an expression that is equivalent to $5(n + 3)$. Select all that apply.
 - a. $5n + 3$
 - b. $5n + 15$
 - c. $3n + 2 + 2n + 1$
 - d. $6(n + 3) - (n + 3)$
 - e. $6(n + 3) - (n + 6)$
5. Select all of the expressions that are equivalent to $12(t + 4)$.
 - a. $(12 \cdot t) + (12 \cdot 4)$
 - b. $(12 + t) + (12 + 4)$
 - c. $6t + 4 + 6t$
 - d. $12t + 48$
 - e. $2(6t + 2)$

6. Select all of the expressions that are equivalent to $3(5x + 7y)$.
- a. $15x + 7y$
 - b. $3(12xy)$
 - c. $15x + 21y$
 - d. $3(5x) + 3(7y)$
 - e. $8x + 10y$
7. Bob was trying two different fertilizers in his field that has a width of 2.5 miles. The field is shown with the two different fertilizers.

Bob's Field



Identify each equation that could be used to find the area, in square miles, of the field of fertilizer for any length x , in miles.

- a. $x^2(2.5)$
- b. $4x + 2.5$
- c. $2.5x + 10$
- d. $2.5(x + 4)$
- e. $x + 4 + 2.5$