4-6 Additional Practice

Leveled Practice In **1–4**, fill in the boxes to add the expressions.

1. $(3z + 1) + (5 + 7z)$

$= (3z + \boxed{}) + (1 + \boxed{})$

$= \boxed{}z + \boxed{}$

2. $(10x - 4) + (-7 + x)$

$= (10x + \boxed{}) + (-4 + \boxed{})$

$= \boxed{}x + \boxed{}$

3. $(8b + 12) + (3n + 6) + (9b - 4)$

$= (8b + \boxed{}b) + \boxed{}n$

$+ (12 + \boxed{} + \boxed{})$

$= \boxed{}b + \boxed{}n + \boxed{}$

4. $\left(\frac{1}{5}x - 4 + 2y\right) + \left(\frac{2}{5}x + 5 - 4y\right)$

$= \left(\frac{1}{5}x + \boxed{}\right) + (-4 + \boxed{}) + (2y + \boxed{})$

$= \boxed{}x + \boxed{} + \boxed{}y$

5. Find the sum: $\left(\frac{3}{7}m - 3 + 4n\right) + \left(\frac{2}{7}m - 2n + 6\right)$

6. Find the sum: $(3.2 + 4x) + (18.25 + 6x)$

7. Find the sum: $(6a + 6) + (3x - 2) + (2a + 4)$

8. Combine like terms.

$(-2z - 3) + (4c + 6y) + (7 + 3c)$

9. The width of a rectangle, in feet, is represented by $(3x - 1.5)$. The length of the rectangle, in feet, is represented by $(1.25x + 3)$. Find the perimeter of the rectangle.

10. Elijah opened a checking account with $125 and deposits $25 into it every week. He opened another checking account with $225 and deposits $35 into it every week. Write a simplified expression to represent how much he will have in both accounts after w weeks.

11. Maria has a fence around her triangular garden. The first side is $(y + 4)$ feet long. The second side is 2 feet longer than the first side. The third side is 3 feet less than 2 times the first side. Write a simplified expression to represent the perimeter of the garden.

12. Use the expression $(3t + 4) + (4t + 3)$.

a. Find the sum.

b. Explain how you know which terms can be combined to find the sum.

13. Higher Order Thinking The expression $3.5d + 5$ represents the number of miles Erin ran last week when she ran 5 miles on Sunday and 3.5 miles each day after Sunday. The expression $2.5d + 3$ represents the number of miles Luis ran last week when he ran 3 miles on Sunday and 2.5 miles each day after Sunday.

a. Write an expression that can be used to determine the total amount Erin and Luis ran last week.

b. What is the total number of miles that Erin and Luis ran through Thursday of last week?

ⓒ Assessment Practice

14. A grocery store conducted a survey to determine which type of fruit its customers prefer. The table indicates the number of customers who prefer each type of fruit.

PART A

Write an expression in the table for each type of fruit to represent the number of customers who prefer that fruit if n customers were surveyed.

Fruit	Bananas	Apples	Oranges
Word Description	30 more than two fifths of the customers	10 fewer than one fifth of the customers	5 more than one fifth of the customers
Expression			

PART B

Write a simplified expression to represent all the customers who prefer either bananas or oranges.