

Practice
7-3***Adding Algebraic Expressions***

1. Identify the number of terms in the expression $9m + 7$.

2. a) Identify all the coefficients of the expression $2 + 6a$.

- b) Identify all the constants of the expression $2 + 6a$.

3. Add $(2a + 8) + (4b + 5)$. Simplify your answer.

4. Add $(8x - 7) + (6x + 8)$. Simplify your answer.

5. Frank is going to plant b vegetable seeds in one garden and $5b + 10$ vegetable seeds in another. How many seeds is Frank going to plant?

6. Nancy and Bill collect coins. Nancy has x coins. Bill has 5 coins fewer than five times the number of coins Nancy has. Write and simplify an expression for the total number of coins Nancy and Bill have. Simplify your answer.
7. **Error Analysis** On a math test a student, Sarah, has to identify all the coefficients and constants of the expression $4 + n + 7m$. Sarah says that 7 is a coefficient and 4 is a constant.
- a) Identify all the coefficients of the expression.
- b) Identify all the constants of the expression.
- c) What error might Sarah have made?
- A. Sarah did not include the constant 1.
 - B. Sarah said 4 is a constant. It is actually a coefficient.
 - C. Sarah said 7 is a coefficient. It is actually a constant.
 - D. Sarah did not include the coefficient 1.
8. a) **Writing** Combine the like terms of the expression $(8 + 6x) + (-4 + 9c)$.
- b) Explain how you simplified the expression in each step.
9. a) **Reasoning** Find the sum $(8x + 2) + (-9x + 7)$.