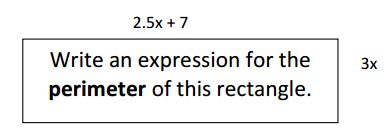
**Using Operations with Linear Equations**

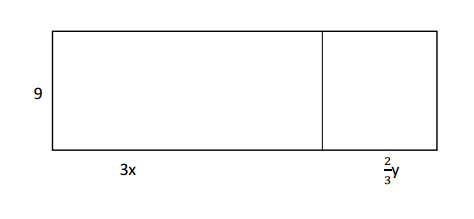
**Complete the following problems.**

1. When is added to , the sum is:
2. If and , what is the value of?
3. Three consecutive numbers are added together and then their sum is multiplied by 4.
   * 1. Some of the equations below represent the total using algebra. Circle all that apply.

|  |  |
| --- | --- |
| Total = | Total= |
| Total = | Total= |

* + 1. Explain your answers.

1. 
2. Find the sum of and .
3. When is subtracted from , the result is:
4. If and , what is the value of ?
5. The result of subtracting and is:
6. What is the factored form of ?
7. Expand ?
8. Sophia says that and are equivalent. Do you agree? Explain by solving and showing your work.
9. What is the area of the rectangle below?



1. Write an expression for the sequence of operations.
   * 1. Add 7 to x, subtract the result from 3, and then double what you have.
     2. Add 3 to x, triple what you have, and then subtract 5 from the result.