Sweet Algebra

Part 1: How many candies are in each bag?
Candy Clues: Write an algebraic expression for each clue.

_____ The teacher has *x* number of candies in his/her bag.

_____ Bag #1 contains four more than twice the number of candies in the teacher's bag

_____ Bag #2 contains three times the number of candies in the teacher's bag

_____ Bag #3 contains 10 more candies than the teacher's bag

_____ Bag #4 has 5 less than 4 times the number of candies as the teacher

_____ Bag #5 has half as many candies as Bag #1

_____ Bag #6 has $\frac{1}{6}$ the number of candies in Bag #2

_____ Bag #7 has one more than three times the number of candies in the teacher's bag

_____ Bag #8 contains four less candies than Bag #3

_____ Bag #9 has twice the sum of the amount of candies in the teacher's bag and four

_____ Bag #10 has six more than 50% of the candies in bag #3

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Part 2: How many candies are in the teacher's bag?

Edible Equations: Write at least three algebraic equations that you can use to find the number of candies in the teacher's bag using the clues below.

The total number of candies in Bags #3, #5, and #9 is 44.

The total number of candies in Bags #2, #4, and #8 is 49.

The difference in the amount of candy in Bag #7 and Bag #1 is 3.

Bag #7 and Bag #4 have the same number of candies.

Bag #9 has one more piece of candy than Bag #4.

Solve two equations to find the number of candies in the teacher's bag.

Which bag would you want? Explain why.