

# Writing Equations

Write variable expressions and an equation for each situation. Solve by guess and check.

1. Marie bought 12 fruits, of which there were  $x$  apples, five fewer oranges than apples, and one pineapple.

- Write a variable expression for the amount of oranges.
- Write an equation that expresses the total amount of fruit that Marie has.
- How many apples did she buy? Oranges?

2. Cucumbers cost 15¢ each and tomatoes costs 9¢ each. Mom buys six more tomatoes than cucumbers. Her total bill is \$1.26.

- Choose a variable for the amount of cucumbers.
- Write a variable expression for the amount of tomatoes.
- Write a variable expression for the cost of the cucumbers, then for the cost of the tomatoes.
- Write an equation about the total bill using the variable expressions from parts b and c.
- How many cucumbers did she buy? Tomatoes? (You can guess and check).

3. Jack is 25 years younger than his mother. Together, their ages add up to 89.

- Choose a variable for Jack's age.
- Write a variable expression for Jack's mom's age.
- Write an equation about the sum of their ages.
- How old is Jack?

4. Lorene has some nickels, twice as many dimes as nickels, and half as many quarters as nickels. All total she has 77 coins.

- Choose a variable for the amount of nickels.
- Write a variable expression for the amount of dimes, and for the amount of quarters.
- Write an equation that expresses the total number of Lorene's coins, using the variable expressions from part b.
- How many dimes does Lorene have? Quarters?