

Problem-Solving Strategy: Guess and Check

Problem Lucas has 18 coins—pennies, nickels, and dimes—in his pocket. There are three times as many pennies as dimes and twice as many nickels as dimes. The number of each coin is divisible by 3, and the number of nickels is also divisible by 2. How many of each coin does Lucas have?

UNDERSTAND

What do you know?

PLAN

How can the guess-and-check strategy help you solve the problem?

SOLVE

Fill in the table with your first guess. Check your answer. Do you need another guess? Why or why not?

18 coins		
_____ pennies	_____ nickels	_____ dimes

Fill in the table with your second guess. Check your answer. Do you need another guess? Why or why not?

18 coins		
_____ pennies	_____ nickels	_____ dimes

What is the solution?

LOOK BACK

How do you know that your answer is reasonable?
