
Age and Coin Word Problems

Example 1. Ann says, “In 10 years, I will be twice as old as I was 22 years ago. How old am I now?”

To solve this little puzzle, we need to first choose a quantity as an unknown. What is not known? Obviously, Ann’s age now. So, let x be Ann’s age now. (Remember always to explain what quantity or thing your unknown denotes.)

Now we translate the clue given to us into symbols. First, her age 22 years ago is $x - 22$. Her age in 10 years is $x + 10$. Twice as old as 22 years ago is $2(x - 22)$. The clue translates into the equation

$$x + 10 = 2(x - 22)$$

1. Solve the equation from example 1.

2. Harry says, “Five years ago, I was $\frac{1}{3}$ as old as I will be in 45 years.” How old is Harry?

3. Hannah says, “In 18 years, I will be three times as old as I was ten years ago.” How old is Hannah?

4. Fifteen years ago, my age was only half of what it will be in 3 years. How old am I?