

Name:

Date:

Period:

Use the following template to solve word problems.

Let Statements

- Determine # of "Let" statements needed
- Write them beginning with
Let $x =$ _____

Equation

- Set up equation USING the "Let" statements just written
- Start with your EQUAL sign

Solve

- Solve the equation using
- Distribute
 - Combine
 - Eliminate

Statement/Sentence

Substitute the value for x back into the "Let" statements to write your sentence answering the question being asked

Solve each problem algebraically. Show all your work on a separate piece of paper.

1. Four times a number less six is eight more than two times the number. Find the number.
2. Roy weighs 50 kg more than Bill. Their combined weight is 170 kg. What is each of their weights?
3. Steve and Stan sold a total of 93 candy bars for a fund-raiser. If Steve sold 5 more than 3 times the number that Stan sold, find the number of candy bars sold by each.
4. Angela is 3 times as old as Linda. In 5 years, Angela will be twice as old as Linda will be. Find their present ages.
5. Juan is 5 years older than Amir. Five years ago, Juan was twice as old as Amir. Find their present ages.
6. Elena's mother is 26 years older than Elena. In 10 years, the sum of their ages will be 80. What are their ages now?
7. Vera is twice as old as Carly. Ten years ago, the sum of their ages was 70. How is each of them now?
8. A man has twice as many quarters as nickels. The total value of the coins is \$4.40. How many of each coin does he have?
9. A girl has a collection of nickels, dimes, and quarters whose total value is \$11.25. She has 3 times as many nickels as dimes, and 5 more quarters than dimes. How many of each coin are in her collection?
10. If 12 more than 9 times a number is equal to 10 times that number plus 4, find the number.
11. The sum of two numbers is 88. One number is 24 greater than the other. Find the two numbers.
12. Five years from now, the sum of the ages of a woman and her daughter will be 40 years. The difference in their present age is 24 years. How old is her daughter now?
13. Sixteen years from now, Pia's age will be twice her age 12 years ago. Find her present age.
14. The total age of a woman and her son is 51 years. Three years ago, the woman was eight times as old as her son. How old is her son now?