

Algebra RH

Essential Question: How do we solve word problems involving age?

Do Now:

1. Tom is x years old. Represent his age in 10 years.
2. Vicki is y years old. Represent her age 2 years ago.
3. Sue is $2x - 3$ years old. Represent her age in 8 years.
4. 6 years ago Paul's age was $2x$. Represent his age 2 years from now.
5. 2 years from now Mary's age is $3x + 5$. Represent her age 4 years ago.
6. Pete is 1 year older than twice his sister's age. Represent each of their ages:
 - a. now
 - b. in 5 years

Age Word Problems

Key Idea:

1. Bill is three times as old as Pete. Six years from now Bill will be twice as old as Pete will be. How old are they now?

2. Sue is 20 years old and Anne is 10 years old. How many years ago was Sue 3 times as old as Anne?

3. Ali's age plus her Dad's age is 50. In 8 years Ali's dad will be twice as old as she is. Find their ages now.

4. Joan is 3 years older than Mary. Twice Joan's age 6 years ago is 14 more than Mary's age 5 years from now. How old are they now?

For each problem, define all unknowns with variable expressions, set up an equation and solve. Show all work on a separate sheet of paper.

1. Sammie is 15 years older than her friend. In 5 years she will be $1\frac{1}{2}$ times as old as her friend. How old are they now?
2. Al is twice as old as Judy. Three years ago Al was 3 times as old as Judy. Find their ages now.
3. A man is 40 years old and his son is 8 years old. In how many years will the man be three times his son's age?
4. Jane is 3 times as old as Alison. In 8 years Jane's age will exceed twice Allison's age at that time by 14 years. Find their current ages.
5. The sum of John's age and Mike's age is 20. John's age 1 year from now will be 9 times Mike's age 1 year ago. Find their current ages.
6. Mark is 10 years younger than Larry. Larry's age 8 years from now will be 4 more than twice Mark's age 3 years ago. How old are they now?
7. Bill is twice as old as Dan. In 7 years Bill will be $1\frac{1}{2}$ times as old as Dan. How old are they both now?
8. Cindy is 4 years less than twice Melissa's age. In two years, Melissa's age will be $\frac{3}{4}$ of Cindy's age. Find their current ages.
9. Sam is 8 years younger than Mike. Four years ago the sum of their ages was 20. Find their ages now.
10. Jean is twice as old as Michelle. The sum of their ages 3 years ago was 45. Find their ages now.