

Name: _____

1. John is now 3 times as old as his brother Sam. In 5 years, John will be twice as old as Sam will be then. Find their present ages.

1.

2. A man is now 6 times as old as his son. In 6 years, the father will be 3 times as old as the son will be then. Find their present ages.

2.

3. Marie is one-ninth as old as her mother. In 3 years, she will be one-fifth as old as her mother will be then. Find their present ages.

3.

4. Josephine is 22 years old and Ruth is 10 years old. In how many years will Josephine be twice as old as Ruth will be then?

4.

5. The sum of a man's age and his daughter's age is 50 years. Eight years from now, the man will be twice as old as his daughter will be then. Find the present age of each.

5.

6. Solve for y in terms of x : $\frac{x+1}{xy} + \frac{x}{y^2} = \frac{1}{y}$

6.

7. The product of two positive consecutive integers exceeds the sum of the two integers by one. Find the two integers. [*Only an algebraic solution will be accepted.*]

7.

8. Simplify:

$$\frac{\frac{x}{d^3} - \frac{4}{xd}}{2d - x}$$

8.

9. Solve for x and check: $(x-1)^2 - 3x(x-2) = 19 - x(x+1) - 6x$

9.

10. When a certain number is divided by another number, the quotient is 1 and the remainder is 2. If one-half of the sum of the two numbers is 20, find the two numbers.

10.
