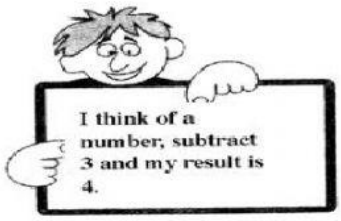
Algebra

Writing algebraic expression

1.



Let y represent the unknown number.

(a) Write an equation to represent the above information.

(b) Solve your equation to find the unknown number.

Y =

2.

A B C

(a) Write an expression to show the total number of matches in box **A** and box **B.**

(b) How many matches are there altogether in **A, B** and **C**? Write your answer in simplest form.

3. John is x old. Jane is twice as old as John

(a) (i) Write an expression for John 's age in terms of x

(ii) Write an expression for Jane's age in terms of x.

The sum of their ages is 54 years.

(b) (i) Write an equation to show this information

(ii) Simplify part (i) to show this information

© Solve the equation form in (b) to find :

(i) John's age (ii) Jane's age

years old years old

4. Andrew is 6 times as old as June.

(a) (i) Write an expression in x to show June's age

(ii) Write an expression to x show Andrew's age.

(iii) Write an expression to show their total age in simplest form.

(b) The sum of their ages is 35.

(i) Write an equation to show this information.

(iii) Write an expression to show their total age in simplest form.

(ii) Calculate June's age.

Years old

(iii) Calculate Andrew's age.

Years old

5.

Ann thinks of a number, **Y**, multiplies it by **4** and then subtract **3**.

(a) Write an expression to show this information.

Sally thinks of a number, **Y**, multiples it by **2** and then add **15**.

(b) Write an expression to show this information.

Ann and Sally both thought of the same number.

© Write an equation to show this information

(c) Solve the equation in © to find the number they both thought of.

Y =

6.

(a) Using **X** as the unknown number, write down an equation to represent Rodney's thought.

(b) Solve an equation to find **X**.

X =