



Algebra (1)



Algebraic Expressions

1) n is added to 4

2) Sum of 4 and y

3) Sum of g and 6

4) 2 is added to h

5) z minus 3

6) Product of 4 and y

7) 6 times f

8) 4 less than m

9) 8 minus x

10) r divided by 5





Algebra (2)



Use BIDMAS to calculate the following

1) $8 \div 4 \times 2 - 1$

6) $4 + 7 \times 16 \div 2$

2) $8 \div 4 \times 3 + 11$

7) $10 + 16 - 16 \div 2$

3) $5 \times 5 + 13 - 5$



8) $11 - 24 \div 6 \times 8$

4) $16 \times 4 + 19 - 6$

9) $14 \times 16 + 16 \div 8$

5) $5 \times 6 + 4 - 3$

10) $10 \times 2 - 1 + 8$



Algebra (3)



Substitution

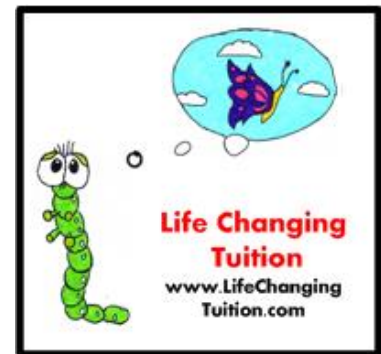
1. Substitute these values into each expression; $a = 5$, $b = 2$

a. $a + b$

b. $a - b$

c. $2a + 3b$

d. $5a - b$



2. Substitute these values into each expression; $x = 4$, $y = 7$, $z = 2$

a. $x + y + z$

b. $2x - y + 3z$

c. $4y + 2z - x$



3. Find the value of each expression using the values given.

a. $\frac{x}{2} + 4y$

$x = 10$, $y = 2$

b. $3(p + 2q)$

$p = 8$, $q = 3$





Algebra (4)



Function Machines

1. You are given the following rule: $\text{number} \rightarrow (\text{number} \times 2) + 1$

What will happen to these numbers if you follow this rule?

a. $4 \rightarrow$

b. 7

c. 10

d. 1

e. 100

f. 20

2. Use the following rule: $\text{number} \rightarrow (\text{number} \div 3) - 1$

What will happen to these numbers if you follow this rule?

a. $6 \rightarrow$

b. 9

c. 27

d. 300

e. 0

f. 99

3. Use the following rule: $n \rightarrow n + 1$

a. $8 \rightarrow$

b. 4

c. 98

d. 1000

e. 0

4. Use the following rule: $n \rightarrow 5n$

a. $8 \rightarrow$

b. 4

c. 10

d. 1000

e. 0





Algebra (5)



Solve the equations below

1) $a + 3 = -5$

4) $6k = 48$



2) $66 = 6c$

5) $\frac{n}{3} = 13$



3) $30 = 6x$

6) $13 = 2 + d$



Algebra (6)



Algebraic Problems

1) Kath is y years old. Her husband Bill is 4 years older. Write down an expression, in terms of y , for Bill's age



2) Cyril has n coins in his collection. His son David has three times as many coins

3) Write down an expression, in terms of n , for the number of coins in David's collection.

4) At a museum, the cost of child admission is C and the cost of adult admission is A . Write an expression for the cost of 3 children and 2 adults to visit the museum

5) There are 100 sheets of paper in a box. There are x boxes. Write an expression, in terms of x , for the number of sheets of paper.



Algebra (7)



Work out the following:

1) $3a + 2a =$ _____

2) $7a - 5a =$ _____

3) $7a + 2b =$ _____

4) $9a - 2b =$ _____

5) $3a \times 2 =$ _____

6) $a \times b =$ _____

7) $6a \times b =$ _____

8) $3a \times 2b =$ _____

9) $a \times 0 =$ _____

10) $a \times 1 =$ _____

11) $a \times a =$ _____

12) $3a \times a =$ _____

