GCSE FOUNDATION · REVISION MAT 1

Forming expressions and equations

1 A pen costs p pence. A ruler costs r pence.

Write an expression for the cost of 3 pens and 2 rulers.

2 Ali is x years old.

Bea is 4 years older than Ali.

Cal is 2 times as old as Ali.

Write expressions for the ages of Bea and Cal.

3 Apples cost a pence each and pears cost b pence each.

Sam says the cost of 5 apples and 2 pears is $7ab$ pence.

Explain why Sam is wrong.

4 Show that the sum of three consecutive whole numbers is always a multiple of 3.

5 Amy, Ben and Cat share some sweets.

Ben has 3 more than Amy.

Cat has twice as many as Ben.

They have 69 sweets altogether.

How many sweets does each person have?

6 An adult ticket costs £4 more than a child ticket.

2 adult tickets and 3 child tickets cost £58 altogether.

Work out the cost of an adult ticket.

Mr&Mrs MATHS

1 $3p + 2r$

2 Bea: $x + 4$

Cal: $2x$

3 The cost is $5a + 2b$ pence. These are unlike terms, so they cannot be added to make 7ab.

ANSWERS · REVISION MAT 1

Forming expressions and equations

4 Let the numbers be n, $n + 1$, $n + 2$

Sum = $3n + 3 = 3(n + 1)$

So the sum is always **a multiple of 3** ✓

5 Amy x, Ben $x + 3$, Cat $2x + 6$

$4x + 9 = 69$, so $x = 15$

Amy **15**, Ben **18**, Cat **36**

6 Child = c, adult = $c + 4$

$2(c + 4) + 3c = 58$

$5c = 50$, $c = 10$

Adult = **£14**