GCSE FOUNDATION · REVISION MAT 4

Forming expressions and equations

1 A book costs b pence.
A magazine costs m pence.

Write an expression for the cost of 5 books and 3 magazines.

2 Jon is x years old.

Kay is 3 years older than Jon.

Lia is 4 times as old as Jon.

Write expressions for the ages of Kay and Lia.

3 Apples cost m pence each and pears cost n pence each.

Viv says the cost of 2 apples and 7 pears is 9mn pence.

Explain why Viv is wrong.

4 Show that the sum of five consecutive whole numbers is always a multiple of 5.

5 Amy, Ben and Cat share some sweets.

Ben has 2 more than Amy.

Cat has twice as many as Ben.

They have 58 sweets altogether.

How many sweets does each person have?

6 An adult ticket costs £3 more than a child ticket.

4 adult tickets and 3 child tickets cost £75 altogether.

Work out the cost of an adult ticket.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Forming expressions and equations

1 **$5b + 3m$**

2 Kay: **$x + 3$**

Lia: **$4x$**

3 The cost is **$2m + 7n$** pence. These are unlike terms, so they cannot be added to make 9mn.

4 Let the numbers be n, $n + 1$, $n + 2$, $n + 3$, $n + 4$

Sum = $5n + 10 = 5(n + 2)$

So the sum is always **a multiple of 5** ✓

5 Amy x, Ben $x + 2$, Cat $2x + 4$

$4x + 6 = 58$, so $x = 13$

Amy **13**, Ben **15**, Cat **30**

6 Child = c, adult = $c + 3$

$4(c + 3) + 3c = 75$

$7c = 63$, $c = 9$

Adult = **£12**