GCSE FOUNDATION · REVISION MAT 2

Substitution

1 $a = 5$ and $b = -2$

Work out the value of

(a) $4a - 3b$

(b) $a^2 + b$

2 $v = u + at$

Work out the value of v when $u = 6$, $a = 2.5$, $t = 8$

3 Mo says,

"When $x = -4$, the value of $2x^2$ is 64."

Explain why Mo is wrong.

4 $p = 4$ and $q = -5$

Show that $2p - q = 13$

5 A taxi firm uses this formula to work out the cost of a journey.

$C = 2.5 + 2.2m$

C is the cost in pounds and
m is the number of miles.

Hana has £22. Can she afford a 9-mile journey?

6 The time, T minutes, to cook a chicken is

$T = 45w + 25$

where w is the weight in kg.

A 2 kg chicken must be ready at 1 pm.

What is the latest time it can go in the oven?

Mr&Mrs MATHS

1 (a) **26**

(b) **23**

2 $v = 26$

3 Square first, then multiply by 2: $(-4)^2 = 16$, $2 \times 16 = 32$.

$2x^2 = 32$

ANSWERS · REVISION MAT 2

Substitution

4 Substitute carefully, using brackets for negatives:

$2p - q = 13$ ✓

5 C = 2.5 + 2.2 × 9 = £22.30

No, she is £0.30 short.

6 T = 45 × 2 + 25 = 115 minutes

115 minutes = 1 h 55 min

Latest start: **11:05 am**

Mr&Mrs MATHS