GCSE FOUNDATION · REVISION MAT 1

Substitution

1 $a = 4$ and $b = -3$

Work out the value of

(a) $3a + 2b$

(b) $a^2 - b$

2 $P = 2l + 2w$

Work out the value of P when $l = 7.5$, $w = 4$

3 Lily says,

"When $x = -5$, the value of x^2 is -25."

Explain why Lily is wrong.

4 $p = 3$ and $q = -2$

Show that $4p - 3q = 18$

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

$C = 3 + 1.8m$

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

Hana has £25. Can she afford a 12-mile journey?

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

$T = 40w + 20$

where w is the weight in kg.

A 2.5 kg chicken must be ready at 6 pm.

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

Mr&Mrs MATHS

1 (a) **6**

(b) **19**

2 **P = 23**

3 A negative number squared is positive: $(-5)^2 = 25$.

$x^2 = \mathbf{25}$

ANSWERS · REVISION MAT 1

Substitution

4 Substitute carefully, using brackets for negatives:

$4p - 3q = 18$ ✓

5 C = 3 + 1.8 × 12 = £24.60

Yes, she has £0.40 left.

6 T = 40 × 2.5 + 20 = 120 minutes

120 minutes = 2 h 0 min

Latest start: **4:00 pm**

Mr&Mrs MATHS