GCSE FOUNDATION · REVISION MAT 2

Changing the subject

1 Make x the subject of

(a) $y = x + 3$

(b) $y = 8x$

2 Make b the subject of

$P = 5b - 2$

3 Mae makes x the subject of $y = 5x - 4$

Mae writes $x = \frac{y - 4}{5}$

Explain the mistake Mae has made.

4 Show that rearranging
$P = 2l + 2w$ to make w the subject gives

$w = (P - 2l) \div 2$

5 A plumber uses this formula to work out a bill.

$C = 40 + 18h$

C is the cost in £ and h is the number of hours.

(a) Make h the subject.

(b) A bill is £148. How many
hours did the plumber work?

6 $P = 2l + 2w$

(a) Make l the subject.

(b) Work out l when $P = 46$ when $w = 9$.

ANSWERS · REVISION MAT 2

Changing the subject

1 (a) $x = y - 3$

(b) $x = \frac{y}{8}$

2 $P + 2 = 5b$

$b = \frac{P + 2}{5}$

3 To undo – 4 you must **add** 4.

$x = \frac{y + 4}{5}$

4 P – 2l = 2w → w = (P – 2l) ÷ 2 ✓

5 (a) $h = \frac{C - 40}{18}$

(b) (148 – 40) ÷ 18 = **6 hours**

6 (a) **l = (P – 2w) ÷ 2**

(b) **14**

Mr&Mrs MATHS