GCSE FOUNDATION · REVISION MAT 3

Changing the subject

1 Make x the subject of

(a) $y = x + 12$

(b) $y = 4x$

2 Make w the subject of

$P = 2w + 7$

3 Nat makes x the subject of $y = 4x - 7$

Nat writes $x = \frac{y - 7}{4}$

Explain the mistake Nat has made.

4 Show that rearranging
$v = u + at$ to make t the subject gives

$t = (v - u) \div a$

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

$C = 30 + 22h$

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

(a) Make h the subject.

(b) A bill is £140. How many
hours did the plumber work?

6 $v = u + at$

(a) Make t the subject.

(b) Work out t when $v = 35$ when $u = 5$ and $a = 4$.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Changing the subject

1 (a) $x = y - 12$

(b) $x = \frac{y}{4}$

2 $P - 7 = 2w$

$w = \frac{P - 7}{2}$

3 To undo – 7 you must **add** 7.

$x = \frac{y + 7}{4}$

4 v – u = at → t = (v – u) ÷ a ✓

5 (a) $h = \frac{C - 30}{22}$

(b) (140 – 30) ÷ 22 = **5 hours**

6 (a) $t = (v - u) \div a$

(b) **7.5**

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