

# Master Maths Worksheet 75

## Creating Formulae / Transposition

# 75

*Name:* \_\_\_\_\_

1. Write the following statements to a formulae.

(a)  $a$  is equal to two times  $b$ .

$a =$

(b) Voltage ( $V$ ) is equal to the product of current ( $I$ ) and resistance ( $R$ ).

$V =$

(c) Area ( $A$ ) is equal to the volume ( $V$ ) divided by length ( $l$ ).

$A =$

(d) Work done ( $W$ ) is equal to the product of mass ( $m$ ), gravity ( $g$ ) and height ( $h$ ).

$W =$

(e) The intensity of light ( $I$ ) is equal to a constant ( $k$ ) divided by the square of the distance ( $d$ ) from the light source.

$I =$

(f) Energy ( $E$ ) is equal to the product of the square of the current ( $I$ ), resistance ( $R$ ) and time ( $t$ ).

$E =$

(g) The speed ( $s$ ) of an object is equal to its distance travelled ( $d$ ) divided by the time taken ( $t$ ).

$s =$

(h) Final velocity ( $v$ ) is equal to the sum of the initial velocity ( $u$ ) and the product of acceleration ( $a$ ) and time ( $t$ ).

$v =$

2. *Transpose* each of the following formulae to make the pronumeral in brackets the subject.

(a)  $y = x + z$  ( $x$ )

$x =$

(b)  $z = 3A$  ( $A$ )

$A =$

(c)  $b = c^2$  ( $c$ )

$c =$

(d)  $B = D - A$  ( $D$ )

$D =$

(e)  $B = D - A$  ( $A$ )

$A =$

(f)  $y = 3x + c$  ( $x$ )

$x =$

(g)  $v = u + at$  ( $u$ )

$u =$

(h)  $v = u + at$  ( $a$ )

$a =$

(i)  $E = mc^2$  ( $m$ )

$m =$

(j)  $E = mc^2$  ( $c$ )

$c =$