Literal Equations: Changing the Subject of a Formula

MEMORANDUM

Name: ..... Class: .....

Date: .....

MARK ____ / 18

Answer all questions. Show all your working — marks are awarded for method as well as the final answer. **Teacher copy: accept any correct equivalent method.**

1 Make x the subject: $y = 2x + 6$ (2)

$x = \frac{y - 6}{2}$ ✓✓ (2)

2 Make x the subject: $y = 5x - 3$ (2)

$x = \frac{y + 3}{5}$ ✓✓ (2)

3 Make b the subject: $A = \frac{1}{2}bh$ (2)

$b = \frac{2A}{h}$ ✓✓ (2)

4 Make h the subject: $V = lbh$ (2)

$h = \frac{V}{lb}$ ✓✓ (2)

5 Make r the subject: $C = 2\pi r$ (2)

$r = \frac{C}{2\pi}$ ✓✓ (2)

6 Make r the subject: $A = \pi r^2$ (3)

$r = \sqrt{A \div \pi}$ ✓✓✓ (3)

7 Make x the subject: $ax = bx + c$ (3)

$x = \frac{c}{a - b}$, $a \neq b$ ✓✓✓ (3)

8 Make t the subject: $v = u + at$ **(2)**

$t = \dfrac{v - u}{a}$ ✓✓ (2)

TOTAL: 18 marks

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