## IGCSE rearranging Answers

1. $\frac{5 A}{r}-2$ or $\frac{5 A-2 r}{r}$
2. $\frac{2 c w-4 w}{5}$ oe
3. $x=\frac{3}{P-1}$
4. $\quad k=( \pm) \sqrt{\frac{4 A}{(4-\pi)}}$ or $2 \sqrt{\frac{A}{(4-\pi)}}$
5. $\frac{4+b c}{c}$ or $\frac{4}{c}+b$ cao
6. $(x=) 3(y-5)$ oe final answer
7. $w=\frac{4-3 c}{c-1}$ www

M1 for correctly multiplying by 5
M1 for correctly dividing by $r$
M1 for correct subtraction in any order

M1 one correct move to clear fractions
M1 second correct move to subtract term
M1 third correct move dividing by 5
May be in any order

M1 for each of the four moves completed correctly

3 M1 factorising (must contain a $\pi$ )
M1 division (by coefficient of $k^{2}$ )
M1 square root

$\mathbf{3} |$| M1 | correct move completed |
| :--- | :--- |

M1 second correct move completed
M1 third correct move completed
$2 \quad$ M1 for correct first move
$y-5=\frac{x}{3}$ or $3 y=x+15$
M1 for their correct second move

4
M1 clearing denominator and removing brackets
M1 correctly collecting terms in $w$ on one side only
M1 factorising correctly
M1 divide by coefficient of $w$

3 M1 correct re-arrangement to isolate the term in $w$
M1 correct multiplication by $a$
M1 correct division by their 3
An incorrect answer scores a maximum of M2
9. (a) 2.84
(b) $\frac{4 \pi^{2} l}{T^{2}}$ oe
10.
(a) $2.5 \times 10^{5}$
(b) $C=1 /\left(L w^{2}\right)$
11. $p=\frac{c}{a-x}$

M1 each correct move but third move marked on answer line

M1 correct substitution of $g$ and $l$ seen

B2 250000 oe or M1 correct part value seen
M1 each correct move
M1 one correct move

M1 second correct move
M1 third correct move marked on answer line
12.

$$
\frac{4 y+2}{y-1} \text { oe }
$$

4
M1 $x y-4 y=x+2$
M1 collecting terms in $x$ on one side
M1 factorising
M1 dividing by coeff of $x$
13.

$$
\sqrt{\frac{\pi x^{2}-A}{\pi}} \text { oe }
$$

14. $x=+/-\sqrt{ }(5 y)-3$

$$
\text { or } x=+/-\sqrt{5 y}-3
$$

15. $m=\frac{J}{v-u}$
16. $\frac{4 h}{g^{2}}$ or $h\left(\frac{2}{g}\right)^{2}$

M1 for one correct move
3
M1 for second correct move M1 for third correct move

3 M1 correct move of the 5 completed
M1 correct move of the square completed
M1 correct move of the 3 completed

2
M1 $m(v-u)$ seen

M1 squaring correctly
M1 clearing denominator correctly
M1 dividing by coefficient of $i$ or SC2 for correct unsimplified expression

