IGCSE rearranging Answers

1.
$$\frac{54}{r} - 2$$
 or $\frac{54-2r}{r}$ 3MI for correctly multiplying by 5
MI for correctly dividing by r
MI for correct subtraction
in any order2. $\frac{2cw-4w}{5}$ oc3MI one correct move to clear fractions
MI second correct move to subtract term
MI third correct move completed3. $x = (\pm) \sqrt{\frac{44}{(4-\pi)}}$ or $2\sqrt{\frac{4}{(4-\pi)}}$ 3MI for each of the four moves completed
correctly4. $k = (\pm) \sqrt{\frac{44}{(4-\pi)}}$ or $2\sqrt{\frac{4}{(4-\pi)}}$ 3MI factorising (must contain a π)
MI division (by coefficient of k^2)
MI square root5. $\frac{4+bc}{c}$ or $\frac{4}{c} + b$ cao3MI for correct move completed
MI square root6. $(x =) 3(y - 5)$ oe final answer2MI for correct first move
 $y - 5 = \frac{3}{2}$ or $3y = x + 15$
MI for their correct second move7. $w = \frac{4-3c}{c-1}$ www4MI correct neargement to isolate the term in w
MI correct division by the 3
An incorrect move substitution of g and l seen
(b) $\frac{4\pi^2 l}{T^2}$ oc9.(a) 2.5×10^5
(b) $C = 1/(lw^2)$ 3B2 250000 or or MI correct part value seen
MI weach correct move
MI each correct move
MI each correct move
MI each correct move
MI each correct move
MI second correct move
MI second correct move
MI third correct move
MI second correct move
MI third correct move

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

13.
$$\sqrt{\frac{\pi x^2 - A}{\pi}}$$
 oe

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

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

$$15. \qquad m = \frac{J}{v - u}$$

16.
$$\frac{4h}{g^2}$$
 or $h\left(\frac{2}{g}\right)^2$

4M1 xy - 4y = x + 2
M1 collecting terms in x on one side
M1 factorising
M1 dividing by coeff of x3M1 for one correct move
M1 for second correct move
M1 for third correct move3M1 correct move of the 5 completed
M1 correct move of the square completed
M1 correct move of the 3 completed2M1 m(v - u) seen3M1 squaring correctly
M1 clearing denominator correctly
M1 dividing by coefficient of i
or SC2 for correct unsimplified expression