<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th><th>Partial Marks</th></tr>
<tr><td rowspan="6">8(b)</td><td>[2 men and 3 others =] 120
[3 men and 2 others =] 60
[4 men and 1 other =] 6</td><td>M2</td><td>M1 for any two correct</td></tr>
<tr><td>186</td><td>A1</td><td></td></tr>
<tr><td>Alternative method</td><td></td><td></td></tr>
<tr><td>[0 men =] 6
[1 man and 4 others =] 60</td><td>(M1)</td><td></td></tr>
<tr><td>(their 252) – (6 + 60)</td><td>(M1)</td><td></td></tr>
<tr><td>186</td><td>(A1)</td><td></td></tr>
<tr><td rowspan="6">8(c)</td><td><table><tr><td>M</td><td>W</td><td>C</td><td></td></tr><tr><td>1</td><td>3</td><td>1</td><td>32</td></tr><tr><td>1</td><td>2</td><td>2</td><td>24</td></tr><tr><td>2</td><td>2</td><td>1</td><td>72</td></tr><tr><td>2</td><td>1</td><td>2</td><td>24</td></tr><tr><td>3</td><td>1</td><td>1</td><td>32</td></tr></table></td><td>M2</td><td>for at least four out of five correct values soi
or M1 for any two or three correct values soi</td></tr>
<tr><td>184</td><td>A1</td><td></td></tr>
<tr><td>Alternative method</td><td></td><td></td></tr>
<tr><td>[0 men =] 6
[0 women] 6
[0 children] 56</td><td>(M1)</td><td></td></tr>
<tr><td>(their 252) – (6 + 6 + 56)</td><td>(M1)</td><td></td></tr>
<tr><td>184</td><td>(A1)</td><td></td></tr>
<tr><td>9(a)</td><td>$[\text{fg}(x) =] \frac{x^2+4}{x^2}$ oe, final answer</td><td>2</td><td>B1 for an attempt at the correct order of composition with at most one error</td></tr>
<tr><td rowspan="2">9(b)</td><td>Complete, correct method to find the inverse</td><td>M1</td><td></td></tr>
<tr><td>$[\text{g}^{-1}(x) =] \sqrt{x-1}$ final answer</td><td>A1</td><td></td></tr>
</table>

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Question	Answer	Marks	Partial Marks
9(c)	$x^3 - x^2 - 4 = 0$	**M1**	condone one sign or arithmetic error
	Shows $x - 2$ is a factor or shows that $x = 2$ is a solution	**M1**	
	Uses $x - 2$ is a factor to find $x^2 + x + 2$	**B2**	**B1** for a quadratic factor with 2 terms correct
	Indicates that $x^2 + x + 2$ has no real roots and states $x = 2$ as the only solution	**A1**	dep on all previous marks awarded
10(a)	$\frac{dy}{dx} = -5x^{-2} + 2x - 1$ oe	**M2**	**M1** for any two correct terms
	[When $x = 1$] $\frac{dy}{dx} = -4$ and $y = 5$	**A1**	
	$y - 5 = -4(x - 1)$ oe	**M1**	**FT** *their* $\left.\frac{dy}{dx}\right\|_{x=1}$ and y; dep on at least **M1**
	$y = -4x + 9$	**A1**	**FT**
10(b)	$F(x) = 5\ln x + \frac{x^3}{3} - \frac{x^2}{2}$ $(+c)$	**B2**	**B1** for $5\ln x$ and one other term correct
	$F(3) - F(1)$	**M1**	dep on at least **B1** for integration
	$5\ln 3 + \frac{14}{3}$	**A1**	