| Solving Equations Mark Scheme |  |  |
| :---: | :---: | :---: |
| 1 | $x=2$ | [1] |
| 2 | $15 a=39$ | [1] Multiply by 3 |
| 3 | $2 x=10$ | [1] Divide by 2 |
|  | $x=5$ | [1] Final answer |
| 4(a) | $3 x=11$ | [1] -2 , then divide by 3 |
|  | $x=\frac{11}{3}$ | [1] Final answer |
| 4(b) | $\begin{gathered} 3 x-7=5 \\ 3 x=12 \end{gathered}$ | [1] Collect like terms, and divide by 3 |
|  | $x=4$ | [1] Final answer |
| 4(c) | $2 x=16$ | [1] Collect like terms, and divide by 2 |
|  | $x=8$ | [1] Final answer |
| 4(d) | $\frac{x}{3}=12$ | [1] + 5 then multiply 3 |
|  | $x=36$ | [1] Final answer |
| 5(a) | $\begin{gathered} 2(x)+2(x+4) \\ 4 x+8 \end{gathered}$ | [1] Forming expression then simplifying |
| 5(b) | $4 x+8=32$ | [1] Forming equation |
|  | $\begin{aligned} 4 x & =24 \\ x & =6 \end{aligned}$ | [1] Final answer |
| 6(a) | $C=55(1)+40(2)$ | [1] Forming equation |
|  | £1.35 | [1] Final answer |
| 6(b) | $C=25(1)+15(2)+90$ | [1] Forming equation |
|  | $\begin{gathered} 25+30+90=£ 1.45 \\ £ 1.45 \end{gathered}$ | [1] Final answer |
| 7(a) | Tax is $25 \%$ of $(E-12500)$ | [1] |
|  | $T=\frac{1}{4}(E-12500)$ | [1] or 0.25 and a different letter or word for earnings |
| 7(b) | $5500=\frac{1}{4}(E-12500)$ | [1] Forming equation |
|  | $\begin{aligned} 22000 & =E-12500 \\ \therefore E & =£ 34,500 \end{aligned}$ | [1] Final answer |
|  |  |  |

