| Question number | Scheme | Marks |
|---|---|---|
| 4 (a) | $x$: 0.5, 1, 1.5, 2, 2.5, 3, 3.5<br>$y$: 10, 5, 4.89, 5.5, 6.32, 7.22, 8.16 | B2<br>(2) |
| (b) | Drawn | B1ft<br>B1ft<br>(2) |
| (c) | $2x+1+\frac{2}{x^2}=8$<br>$x=0.6 \quad x=3.4$ | M1<br>A1<br>(2) |
| (d) | $2x+1+\frac{2}{x^2}=\frac{1}{2}x+6$<br>$y=\frac{1}{2}x+6$ drawn<br>$x=0.7 \quad x=3.2$ | M1 A1<br>M1<br>A1 A1<br>(5) |
| | | **[11]** |

| | **Notes** |
|---|---|
| **(a)** | |
| **B2** | For all 4 values correct<br>(B1 for at least 2 values correct) |
| **(b)** | |
| **B1ft** | For points plotted ft their table (allow half square tolerance) |
| **B1ft** | For points joined together with a smooth curve ft their table |
| **(c)** | |
| **M1** | For $2x+1+\frac{2}{x^2}=8$ may be implied by [$y$ =] 8 identified on the graph |
| **A1** | For 0.6 and 3.4 (Allow 0.7 for 0.6) |
| **(d)** | |
| **M1** | For adding $\frac{1}{2}x$ to both sides of the equation or adding 1 to both sides of the equation |
| **A1** | For $2x+1+\frac{2}{x^2}=\frac{1}{2}x+6$ |
| **M1** | For $y=\frac{1}{2}x+6$ drawn |
| **A1** | For 0.7 (allow 0.8) |
| **A1** | For 3.2 (allow 3.3) |