## More Quadratic Equations and Inequalities Revision

| (a) | (b) |  | (c) |  | (d) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { Solve } \\ x^{2}+x-20=0 \end{gathered}$ | Solve, by completing the square, $x^{2}+6 x+3=0$ <br> giving answers in surd form |  | Solve$(x+3)(x-5)>0$ |  | Solve $3 x^{2}-11 x-7$ <br> giving your answers to 3 significant figures |
| (e) | (f) |  | (g) |  | (h) |
| Solve $x^{2} \leq 25$ | $\begin{gathered} \text { Solve } \\ 5 x^{2}+18 x=8 \end{gathered}$ |  | Solve$\begin{gathered} y=x+1 \\ y=x^{2}+5 x-11 \end{gathered}$ |  | $\begin{gathered} \text { Solve } \\ 2 x^{2}-13 x+10<0 \end{gathered}$ |
| (i) |  | (j) |  | (k) |  |
| The area of a triangle with base $(x+9)$ cm and height $(2 x+1) \mathrm{cm}$ is $21 \mathrm{~cm}^{2}$. Find the value of $x$. |  | A rectangle has a length of $(x-6) \mathrm{cm}$ and a width of $4 x \mathrm{~cm}$. The area of the rectangle is less than $13 \mathrm{~cm}^{2}$. Find the range of possible values of $x$. |  | Solve $\begin{gathered} x+2 y=7 \\ x^{2}+y^{2}=10 \end{gathered}$ | Solve $\begin{gathered} x+2 y=7 \\ x^{2}+y^{2}=10 \end{gathered}$ |

