## Simultaneous Equations with one Quadratic - graphically

1. Here is the graph of $x^{2}+y^{2}=5$


By drawing the line $x+y=3$ find the solutions to the simultaneous equations

$$
\begin{gathered}
x^{2}+y^{2}=5 \\
x+y=3
\end{gathered}
$$

3. This is the graph of $y=x^{2}-3 x-2$


Use the graph to solve the simultaneous equations

$$
\begin{gathered}
y=x^{2}-3 x-2 \\
y=2 x-6
\end{gathered}
$$

2. Here is the graph of $y=x^{2}+x-2$


By drawing the line $y=2 x+4$, find the solutions to the simultaneous equations

$$
\begin{gathered}
y=x^{2}+x-2 \\
y=2 x+4
\end{gathered}
$$

4. This is the graph of $y^{2}-x=6$


Use the graph to solve the simultaneous equations

$$
\begin{gathered}
y^{2}-x=6 \\
y-x=0
\end{gathered}
$$

