## Translations Assignment $_{\text {. }}$

1. Sketch the graph of $y=(x+4)^{2}$ without using your calculator. Find the $x$ and $y$ intercepts of the function.

2. Sketch the graph of $y=x^{2}+4$ without using your calculator. Find the $x$ and $y$ intercepts of the function.

3. Sketch the graph of $y=\frac{1}{x-4}$ without using your calculator. State the domain and range of the function.

4. Sketch the graph of $y=|x-3|+4$ without using your calculator. State the domain and range of the function.

5. Sketch the graph of $y=\sqrt{x-2}+4$ without using your calculator. State the domain and range of the function.

6. ( $-2,6)$ is an image point on the transformed graph of $g(x)=f(x+2)-7$. Determine the original point on the graph of $f(x)$.
