1. Use the given graph of function $f$ to sketch a graph of its derivative, $f'$. 

\begin{align*}
\text{a)} & \quad \text{\includegraphics{image1}} \\
\text{b)} & \quad \text{\includegraphics{image2}} \\
\text{c)} & \quad \text{\includegraphics{image3}} \\
\text{d)} & \quad \text{\includegraphics{image4}} \\
\text{e)} & \quad \text{\includegraphics{image5}} \\
\text{f)} & \quad \text{\includegraphics{image6}} \\
\text{g)} & \quad \text{\includegraphics{image7}} \\
\text{h)} & \quad \text{\includegraphics{image8}} \\
\text{i)} & \quad \text{\includegraphics{image9}} \\
\text{j)} & \quad \text{\includegraphics{image10}} \\
\text{k)} & \quad \text{\includegraphics{image11}} \\
\end{align*}
2. The following chart represents the weight $W$ (lbs.) of a newborn baby as a function of time $t$ (months).

![Chart showing weight gain over time](chart)

a. What is the baby's weight at birth? after 3 months? after 1 year?

b. What is an estimate of the baby's growth rate (lbs./month) at birth? after 3 months? after 1 year?

c. When is the baby growing at the fastest rate during its first year of life and what is an estimate for this rate?