Let \( f(x) = \sqrt{x-2} \).
(a) Graph \( f(x) \) on your calculator using the window \(-10 \leq x \leq 10\) and \(-10 \leq y \leq 10\). Carefully copy what you see in the space below.

(b) Based on this graph, what would you say the domain of \( f(x) \) is? Write your answer as an inequality involving the variable \( x \).

(c) Can you explain why your answer in (b) is correct by looking at the formula for the function? Explain.

(d) Based on the graph, what would you say the range of \( f(x) \) is? Write your answer as an inequality involving the variable \( y \).

(e) Can you explain why your answer in (d) is correct by looking at the formula for the function? Explain.
2 Use a graph to identify the domain and range of the function \( g(x) = 3 + e^x \). Then explain why the function’s formula tells you what the domain and range are. Show your graph and your reasoning in the space below.

3 Use a graph to identify the domain and range of the function \( h(x) = \frac{1}{x-4} \). Then explain why the function’s formula tells you what the domain and range are. Show your graph and your reasoning in the space below.