Example

Consider the function \( y = f(x) \) given in the following graph.

1. What is the domain of \( f \)?
   \textbf{ANSWER:} \( f \) is defined when \( x \geq -1 \), so the domain is \([-1, \infty)\).

2. What is the range of \( f \)?
   \textbf{ANSWER:} The smallest value \( f \) takes is 0, and \( f \) takes every value larger than that. So the range is \([0, \infty)\).

3. What is/are the \( x \)-intercept(s)?
   \textbf{ANSWER:} The function is on the \( x \)-axis at \( x = -1 \), so the only \( x \)-intercept is \(-1\).

4. What is/are the \( y \)-intercept(s)?
   \textbf{ANSWER:} The function is on the \( y \)-axis at \( y = 1 \), so the only \( y \)-intercept is 1.

5. \( f(0) = ? \)
   \textbf{ANSWER:} When \( x = 0 \), the corresponding \( y \)-coordinate on the graph of \( f \) is 1. So then \( f(0) = 1 \).