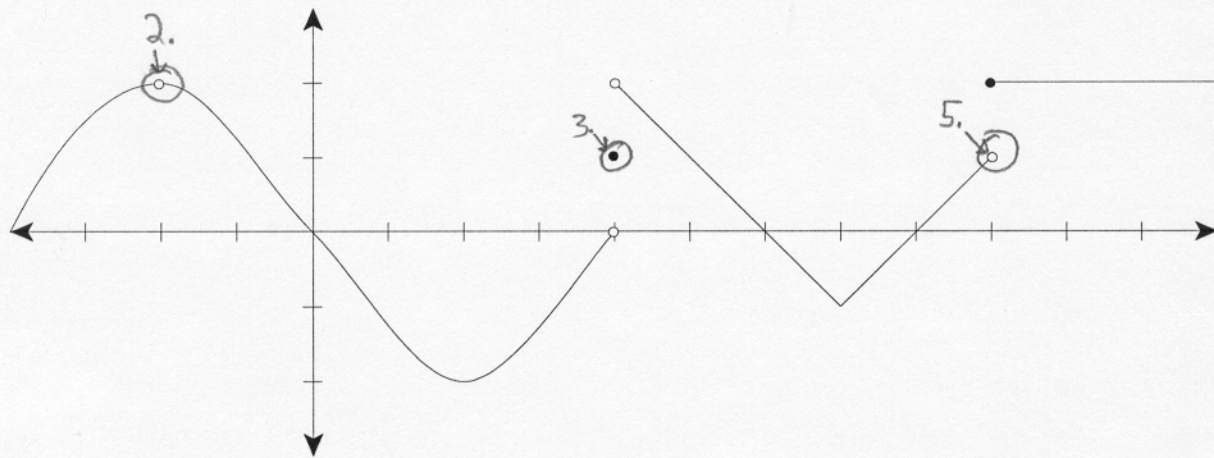


Each problem is worth 2 points. Clear and complete justification is required for full credit.



Use the graph of $f(x)$ shown above to answer the following questions:

1. What is $f(-2)$?

$f(-2)$ does not exist because there is an empty dot where $f(-2)$ should be.

2. What is $\lim_{x \rightarrow -2} f(x)$?

$$\underline{\lim_{x \rightarrow -2} f(x) = 2}$$

3. What is $f(4)$?

$$\underline{f(4) = 1}$$

Excellent

4. What is $\lim_{x \rightarrow 4} f(x)$?

$\lim_{x \rightarrow 4} f(x)$ does not exist. Both sides approach at different heights.

5. What is $\lim_{x \rightarrow 9^-} f(x)$?

$$\underline{\lim_{x \rightarrow 9^-} f(x) = 1}$$