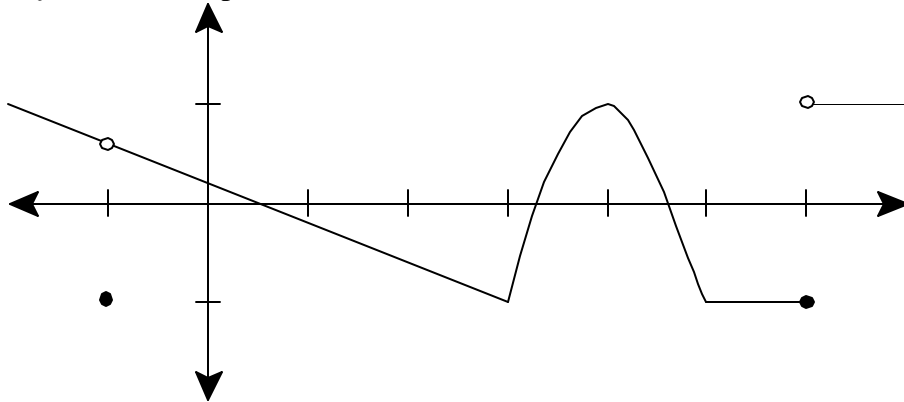


Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. Scientific tests are being performed on a weasel to determine the efficiency of its kidneys. 20mg of acetaminophen are injected into the weasel, and an hour later the tests show that 12mg remain in its system. If the amount of the drug is decaying exponentially, find a formula for the amount after  $t$  hours have passed.

Use the graph of  $f(x)$  below for problems 2-4:



2. What is  $f(6)$ ?

3. What is  $\lim_{x \rightarrow 6^+} f(x)$ ?

4. What is  $\lim_{x \rightarrow 6} f(x)$ ?