2.*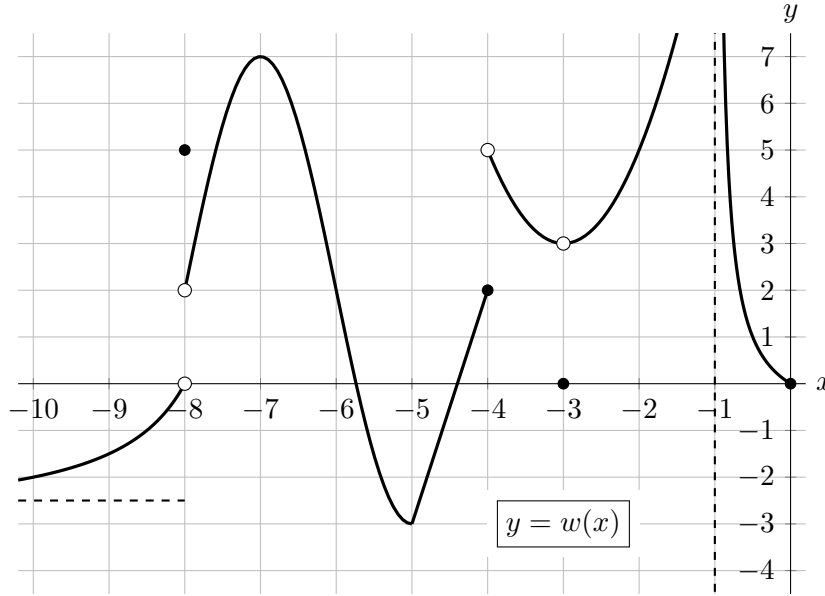* [8 points] Below is a portion of a graph of an **even function $w(x)$. Note that $w(x)$ has a vertical asymptote at $x = -1$, has a horizontal asymptote at $y = -2.5$, and is linear on $[-5, -4]$.

Evaluate each of the given quantities. If the value does not represent a real number (including the case of limits that diverge to ∞ and $-\infty$), write DNE. You do not need to show work in this problem. Give your answers in exact form.

a. [1 point] $\lim\limits_{p \to -4^+} w(p)$

Answer: _____

b. [1 point] $\lim\limits_{x \to -8} w(x)$

Answer: _____

c. [2 points] $\lim\limits_{h \to -1} w(-2 + h)$

Answer: _____

d. [2 points] $\lim\limits_{x \to \infty} w(x)$

Answer: _____

e. [2 points] $\lim\limits_{h \to 0} \left((3 - h)^2 + \dfrac{w(-4.5 + h) - w(-4.5)}{h} \right)$

Answer: _____