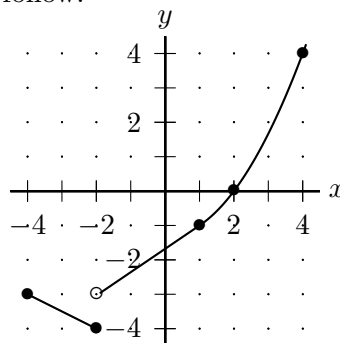**4.** [11 points] Invertible functions q, n, and h are described by the table, formula, and graph below. Use this information to answer the questions that follow.

x	-4	-1	0	1	4
$q(x)$	10	1	-1	-2	-4

$$n(t) = 3 - 2t$$

Graph of $y = h(x)$

a. [3 points] Based on the data in the table above, determine which of the following statements could be true about the function q on the entire interval from $x = -4$ to $x = 4$. (*Circle* ALL *such statements or circle* NONE OF THESE.)

q is an increasing function. q is concave up.

q is a decreasing function. q is concave down.

q is a linear function.   NONE OF THESE

b. [5 points] Evaluate each of the following.

(i) $h(-2) - 2q(-4)$ (ii) $5q^{-1}(1)$

Answer: _____   **Answer:** _____

(iii) $q(q(q(0)))$ (iv) $n(h^{-1}(-3))$

Answer: _____   **Answer:** _____

c. [3 points] Find a formula for $4n(n(t))$. *Simplify your answer completely.*

Answer: $4n(n(t)) =$ _____