

Part I: Matt is selling kites to earn money for his upcoming trip to the Big Island. He had to buy equipment to make the kites for 56 dollars and he sells each kite he makes for 7 dollars. The function $P(k) = 7k - 56$ models this situation, where k is the number of kites sold and $P(k)$ is the net profit he has made after selling k number of kites.

- 1) What is the value of $P(20)$ with units?

- 2) What does $P(20)$ mean in the context of this situation? *Use a complete sentence.*

- 3) What is the value of $P(8)$ with units?

- 4) What does $P(8)$ mean in the context of this situation? *Use a complete sentence.*

Part II: Leilani is measuring her brother Michael’s height over his lifetime. The following table represents her data where y stands for Michael’s age in years and $H(y)$ represents his height in feet at that age.

- 5) What is the value of $H(9)$ with units?

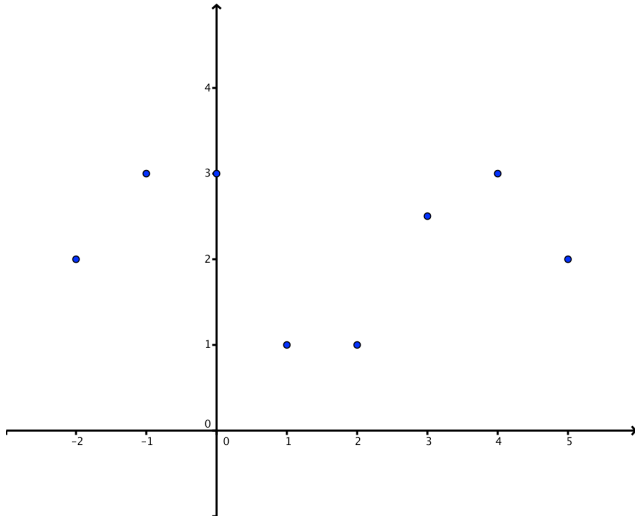
- 6) What does $H(9)$ mean in this context? *Use a complete sentence.*

- 7) What do you think happens between 12 and 15 years of age?

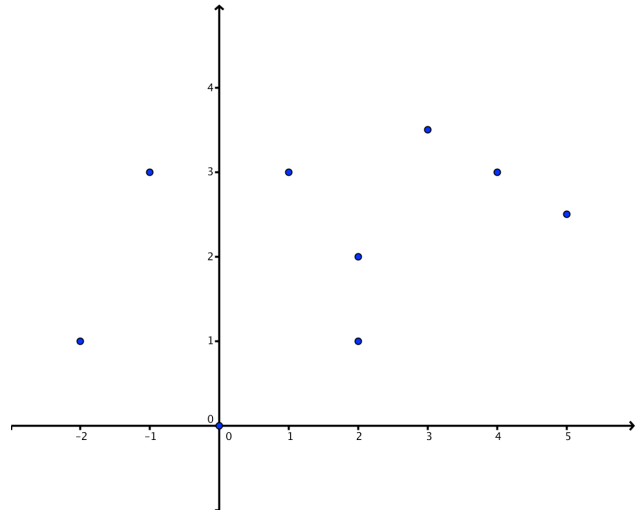
y	$H(y)$
0	1
3	2.3
6	4
9	4.5
12	5
15	5

Part III: Decide (circle either Yes or No) if the following plots represent the graph of a *function*. If your answer is “No”, draw a vertical line to indicate where the *vertical line test* failed.

8. Yes No



9. Yes No



10. Yes No

