6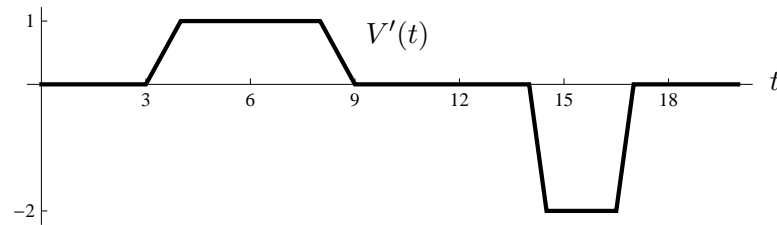. [9 points]   Trini is filling a bucket with water in order to water her garden. She brings the bucket to her garden hose, fills it up, walks to her row of tomato plants, and gradually empties it. If $V(t)$ is the volume of water in the bucket at time t, then the graph below shows the derivative, $V'(t)$:

In the following questions, **no explanation** is necessary.

a. [2 points]   At what time does Trini begin to fill the bucket?

> *Solution:*
> $$t = 3$$

b. [2 points]   At what time does Trini stop filling the bucket?

> *Solution:*
> $$t = 9$$

c. [2 points]   At what time does Trini start to empty the bucket?

> *Solution:*
> $$t = 14$$

d. [3 points]   On the axes below, sketch a well-labeled graph of $-V'(t+3)$. (Remember that the figure above gives the graph of $V'(t)$.)