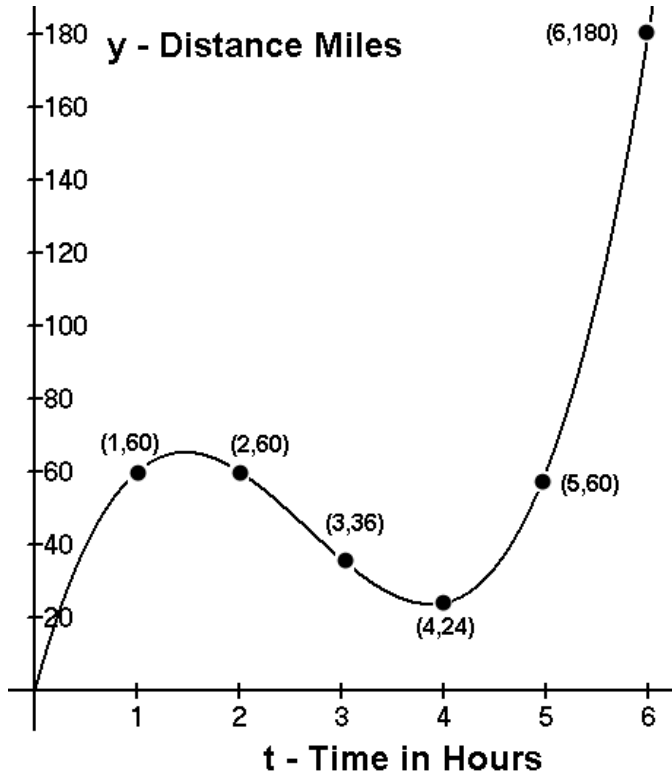


21. The function below shows the distance in miles from New York for a driver.

What is the average rate of change (in miles per hour) of the position of the driver?

- a) From $t = 1$ to $t = 5$? b) From $t = 0$ to $t = 6$?
 c) From $t = 5$ to $t = 6$? d) From $t = 2$ to $t = 4$?



Key: a) 0 mph b) 30 mph c) 120 mph d) -18 mph

22. Big State Power Company charges customers a monthly charge of \$12.50 plus 7 ¢ per KWH for the first 500 KWH. After the first 500 KWH, the charge is 5 ¢ per KWH. Write an equation for the total cost $C(x)$ for a monthly usage of x KWH.

Key:

$$C(x) = \begin{cases} 12.5 + .07x & 0 < x \leq 500 \text{ KWH} \\ 22.50 + .05x & x > 500 \text{ KWH} \end{cases}$$