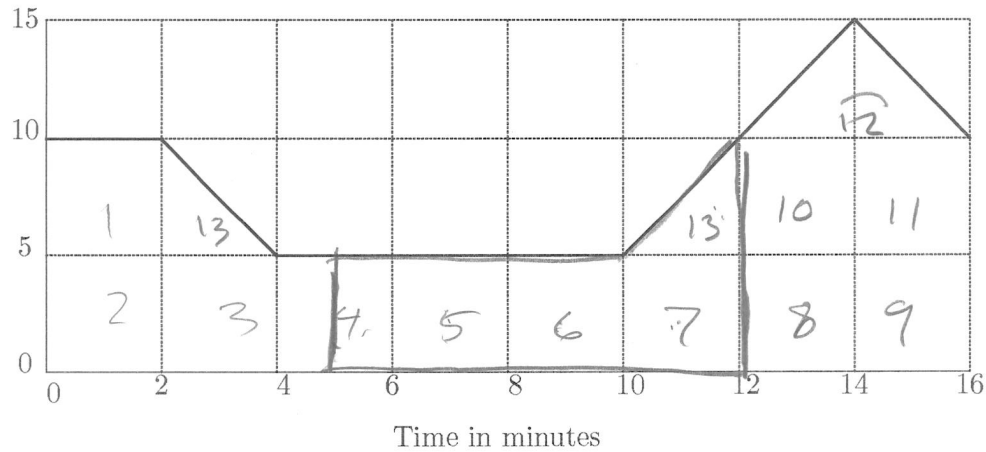**Quiz #27**   Name: _____ Key _____

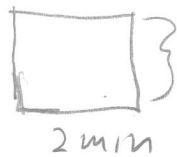*You must show your work to get full credit.*

The graph shows the velocity of a turtle in feet/minute as a function of time in minutes.

Velefity in ft/min

Time in minutes

Recall that the area under the graph between to time values gives the change in distance.

1. Each box in the graph represents how much distance?

_____ 10 ft _____

5 ft/min

(2 min)(5 ft/min) = 10 ft

2 min

2. How far did the turtle cover in the full 16 minutes?

Distance covered is _____ 130 ft _____

13 boxes = 13(10) = 130 ft

3. How far did the turtle cover between $t = 5$ and $t = 12$ minutes?

Distance covered is _____ 40 ft _____

total of 4 boxes = 4(10) = 40 ft