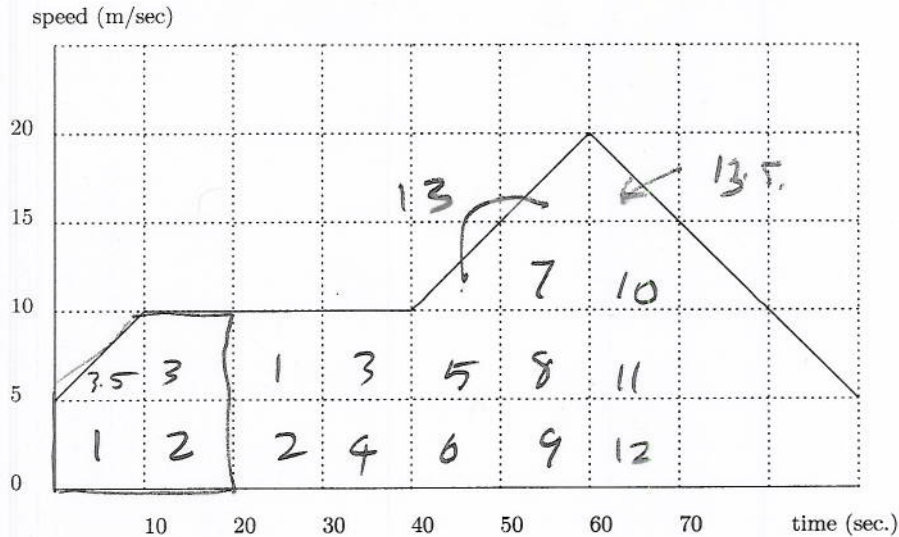# Mathematics 122

Name: _____ Key _____

You must show your work to get full credit.

The following graph gives the speed, in meters per sec, of a go-cart as function of time, in seconds.

speed (m/sec)

(1) Each box in the graph represents how much distance traveled?

1 pt

$(10 \text{ m/sec}) \times 5 (\text{sec}) = 50 \text{ m.}$ _____ 50 meters _____

(2) How far does the go-cart travel in the first 20 seconds?

2 pt

$3\frac{1}{2}$ boxes $= (3.5) \times 50$ meters   _____ 175 meters _____

$= 175$ meters

(3) How far does the go-cart travel between the times $t = 20$ and $t = 70$?

2 pt

_____ 675 meters. _____

$(13.5) \text{ boxes} = (13.5)(50) \text{ meters}$

$= 675.0$ meters