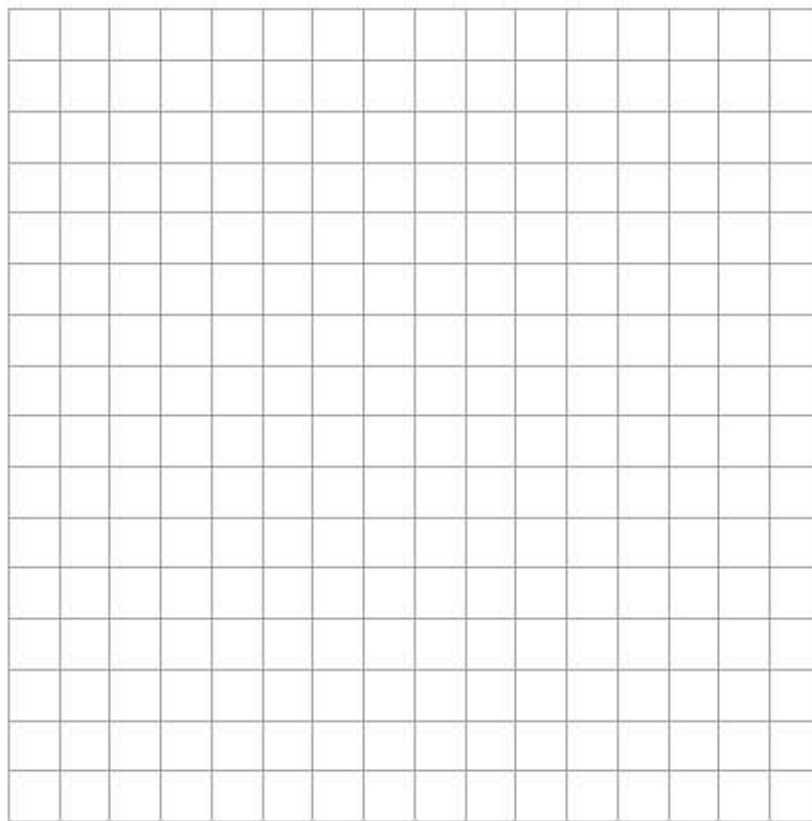


# Graphing Experimental Data

The data table shows the velocity of a car during a 5.0 s interval.

|           |     |     |     |     |     |     |
|-----------|-----|-----|-----|-----|-----|-----|
| $t$ (s)   | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 |
| $v$ (m/s) | 12  | 15  | 15  | 18  | 20  | 21  |

- a) Plot the data on the graph below and draw a best-fit straight line.



- b) Calculate the area bounded by the graph and the time axis between  $t = 0.0$  and 5.0 s.
- c) What does this area represent?