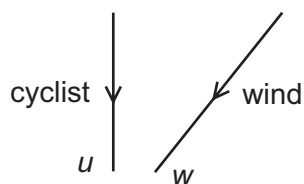
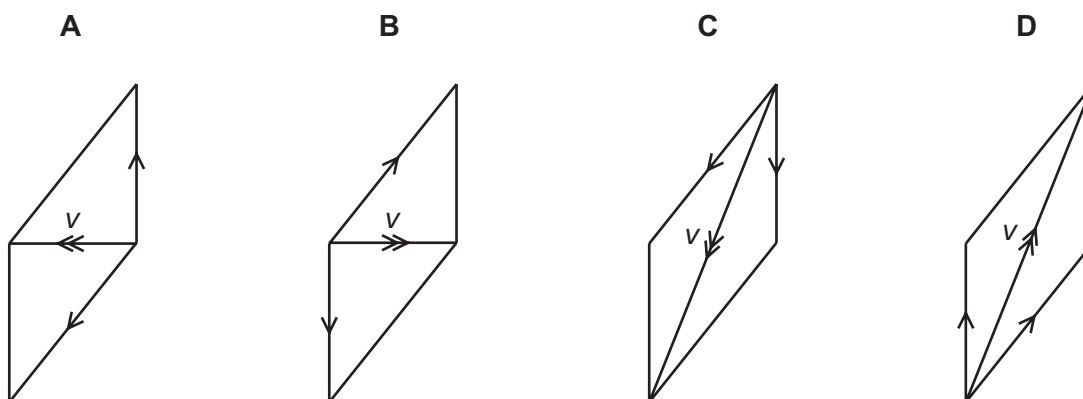


- 4 A cyclist is travelling due south with velocity u . The wind is blowing from the north-east with velocity w .



The wind has a velocity v relative to the cyclist, where $v = w - u$.

Which vector diagram shows the magnitude and direction of velocity v ?



- 5 A student takes measurements of the current in a resistor of constant resistance and the potential difference (p.d.) across it. The readings are then used to plot a graph of current against p.d.

There is a systematic error in the current readings.

How could this be identified from the graph?

- A At least one anomalous data point can be identified.
- B The data points are scattered about the straight line of best fit.
- C The graph is a curve, not a straight line.
- D The straight line graph does not pass through the origin.

Space for working