

UNIT 19 *Vectors*

Activities

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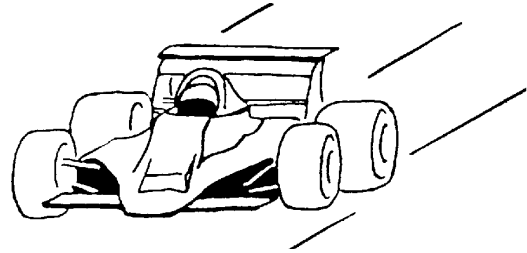
19.1 Vectorace

Notes and Solutions (1 page)

ACTIVITY 19.1

Vectorace

This is a game for up to four players, using the grid below and one counter each to represent their car.



Each player starts their car on a grid point on the starting line and moves each time interval by giving their VELOCITY VECTOR in the form $\begin{pmatrix} a \\ b \end{pmatrix}$.

This means that the car moves

a units to the right and **b** units up

Players take it in turn to play, and can vary each of the components of their velocity vector by at most one.

Each player starts with initial velocity vector $\begin{pmatrix} 0 \\ 0 \end{pmatrix}$.

Grid points on the boundaries are allowed, but if your car crosses the boundary, it crashes and is out of the race. The first car to complete a circuit is the winner.

