1 Further trigonometry

2 Further calculus

3 Further differential equations

4 Coordinate systems

5 Further vectors

5.1 Finding areas of shapes

- Area of triangle $\triangle ABC = \frac{1}{2}|\overrightarrow{AB} \times \overrightarrow{AC}|$
- Area of parallelogram $ABCD = |(b-a) \times (d-a)| = |(a \times b) + (b \times d) + (d \times a)|$ (A, B, C, D have position vector a, b, c, d respectively)

5.2 Scalar triple product

- Volume of parallelepiped $= a \cdot (b \times c)$ (a, b, $c = 3$ different sides)
- Volume of tetrahedron $ABCD = \frac{1}{6}|\overrightarrow{AD} \cdot (\overrightarrow{AB} \times \overrightarrow{AC})|$

5.3 Straight lines

5.3.1 Vector equation of line

- $(\vec{r} - \vec{a}) \times \vec{b} = 0$
- $\vec{a}$ = position vector of a point on line, $\vec{b}$ = directional vector

6 Further numerical methods

7 Inequalities