**9C Scalar Products & Angles Between Lines**

1. Given that and .
2. Find
3. Find the angle between and , giving your answer in degrees to 1 decimal place
4. Given that the vectors and are perpendicular, find the value of **.**
5. Given that and , find a vector which is perpendicular to both and .
6. The points , and have coordinates , and respectively.
7. Find
8. Hence, or otherwise, find the area of triangle