THGONOMETRY (Q 5, PAPER 2)

LESSON NO. 5: COSINE RULE

2005

- 5 (b) In the triangle abc, |ab| = 5 cm and |bc| = 8 cm. The area of the triangle is 16.58 cm².
 - (i) Find $|\angle abc|$, correct to the nearest degree.
 - (ii) Find |ac|, correct to the nearest centimetre.



2003

- 5 (c) One side of a triangle has length 8 cm and another has length 3 cm. The angle between these two sides measures 60°.
 - (i) Find the length of the third side.
 - (ii) Find the measures of the two remaining angles, correct to the nearest degree.

2001

5 (b) In the triangle *abc*, |ab| = 3 units, |bc| = 7 units and $|\angle abc| = 67^{\circ}$.

(i) Calculate the area of the triangle *abc*, correct to one decimal place.

(ii) Calculate |ac|, correct to the nearest whole number.

1999

5 (c) Two ships, A and B, leave port k at noon. A is travelling due East and B is travelling East 70° South, as shown. Calculate, to the nearest km, the distance between A and B when A is 8 km from k and B is 12 km from k.



7

67°





Answers			
2005	5	(b) (i) 56°	(ii) 7 cm
2003	5	(c) (i) 7 cm	(ii) 22°, 98°
2001	5	(b) (i) 9.7 units ²	(ii) 6 units
1999	5	(c) 12 km	
1997	5	(a) 3.6 cm	
1996	5	(c) (i) 23 cm	(ii) 67°