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**Trigonometric Ratios - Edexcel Past Exam Questions**

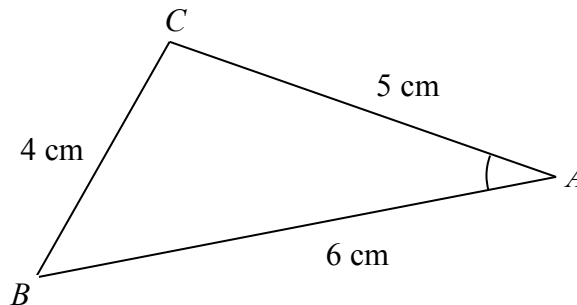
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1. In the triangle  $ABC$ ,  $AB = 8$  cm,  $AC = 7$  cm,  $\angle ABC = 28.5^\circ$  and  $\angle ACB = x$  degrees.
- (a) Use the sine rule to find the value of  $\sin x$ , giving your answer to 3 decimal places. (3)
- Given that there are two possible values of  $x$ ,
- (b) find these values of  $x$ , giving your answers to 2 decimal places. (3)

**June 05 Q7 (edited)**

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2.



**Figure 1**

Figure 1 shows the triangle  $ABC$ , with  $AB = 6$  cm,  $BC = 4$  cm and  $CA = 5$  cm.

- (a) Show that  $\cos A = \frac{3}{4}$ . (3)
- (b) Hence, or otherwise, find the exact value of  $\sin A$ . (2)

**June 07 Q4**

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3.

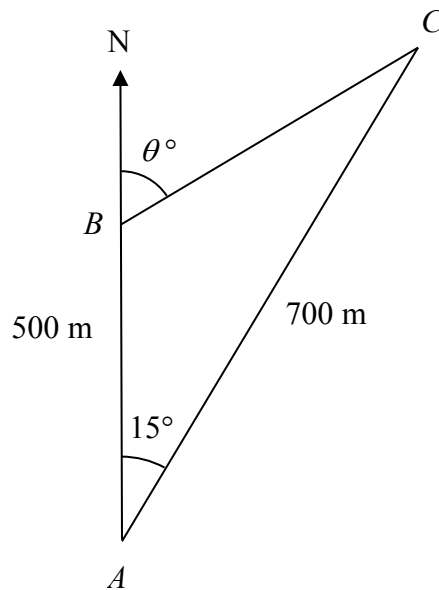


Figure 1 shows 3 yachts  $A$ ,  $B$  and  $C$  which are assumed to be in the same horizontal plane. Yacht  $B$  is 500 m due north of yacht  $A$  and yacht  $C$  is 700 m from  $A$ . The bearing of  $C$  from  $A$  is  $015^\circ$ .

- (a) Calculate the distance between yacht  $B$  and yacht  $C$ , in metres to 3 significant figures. (3)

The bearing of yacht  $C$  from yacht  $B$  is  $\theta^\circ$ , as shown in Figure 1.

- (b) Calculate the value of  $\theta$ . (4)

**Jan 08 Q6**

4. In the triangle  $ABC$ ,  $AB = 11$  cm,  $BC = 7$  cm and  $CA = 8$  cm.

- (a) Find the size of angle  $C$ , giving your answer in degrees to 3 significant figures. (3)

- (b) Find the area of triangle  $ABC$ , giving your answer in  $\text{cm}^2$  to 3 significant figures. (3)

**Jan 11 Q2 (edited)**