Geometry 4H Assessment

Higher Level

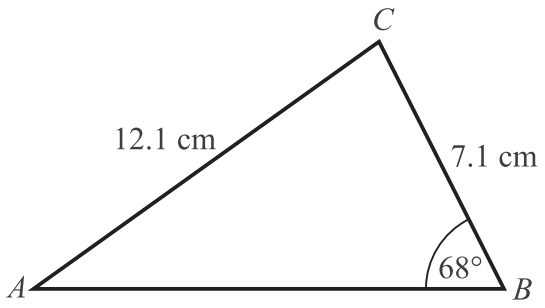
 *All questions*

Clip	Grade	Title of clip	Question(s)	Marked out of	Score	%
201	7	The Sine Rule	1 - 3	11	___	___
202	7	The Cosine Rule	4 - 5	6	___	___
203	7	Area of a Triangle Using Sine	6 - 8	15	___	___
217	8/9	Pythagoras in 3D	9	4	___	___
218	8/9	Trigonometry in 3D	10	5	___	___
219	8/9	Vectors	11 - 12	9	___	___

Out of 50 TOTAL SCORE _____

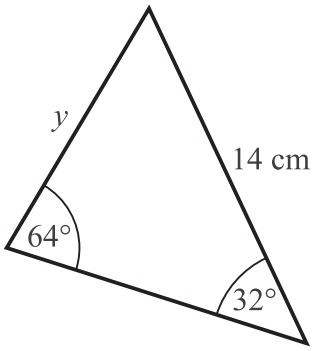
Final Percentage [ ] %

1)



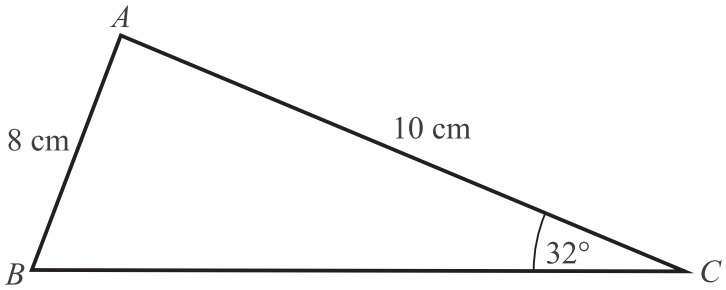
Work out the size of angle A.
Give your answer to 1 decimal place. _____ ° **4**

2)



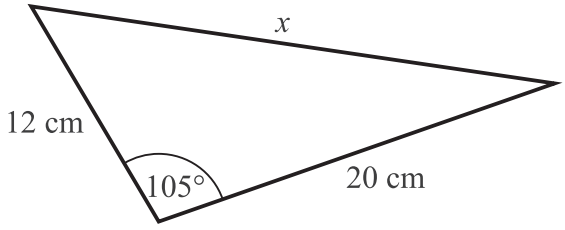
Work out the value of y.
Give your answer to 1 decimal place. _____ cm **3**

3) In the diagram, angle A is obtuse.



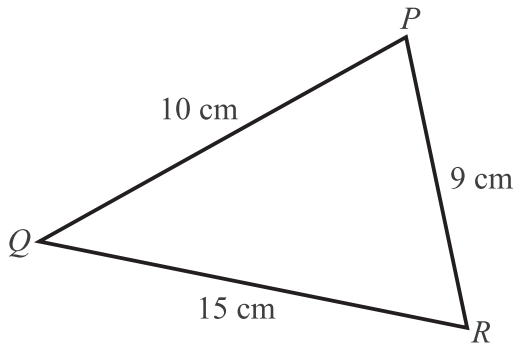
Work out the size of angle A.
Give your answer to 1 decimal place. _____ ° **4**

4)



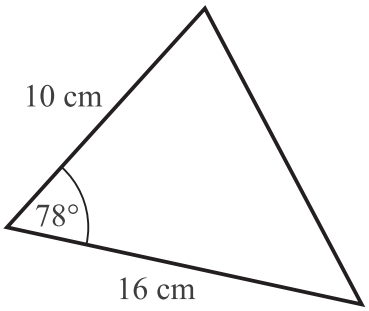
Find the length of side x.
Give your answer to 3 significant figures. _____ cm **3**

5)



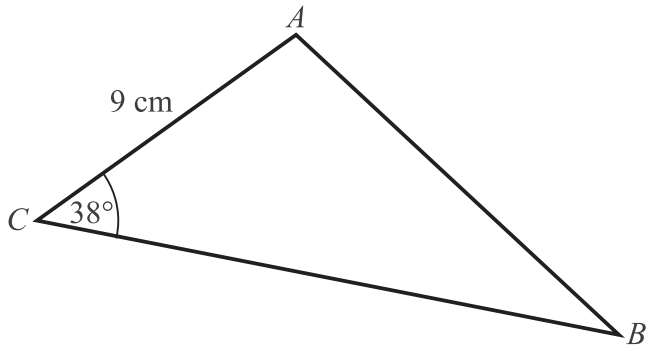
Calculate the size of angle *P*.
Give your answer to 3 significant figures. _____° **3**

6)



Work out the area of this triangle.
Give your answer to 3 significant figures. _____cm^2 **3**

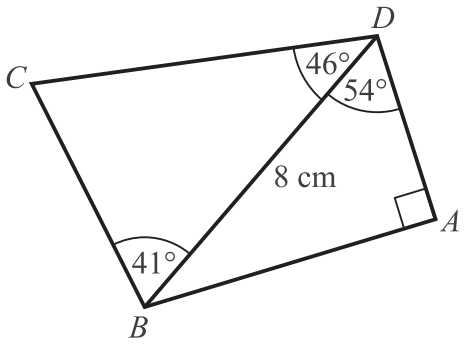
7)



The area of the triangle is 120 cm^2.

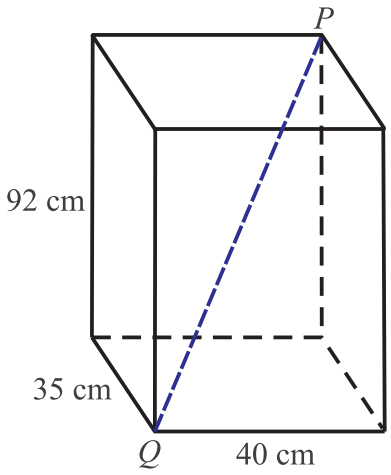
Work out the length of *BC*
Give your answer to 3 significant figures. _____cm **5**

8)



Work out the area of *ABCD*.
Give your answer to 3 significant figures. _____cm^2 **7**

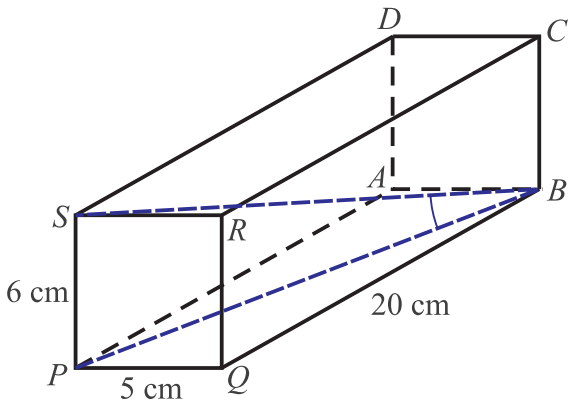
9)



This is a picture of a cuboid.

Find the length of PQ.
Give your answer to 3 significant figures. _____cm **4**

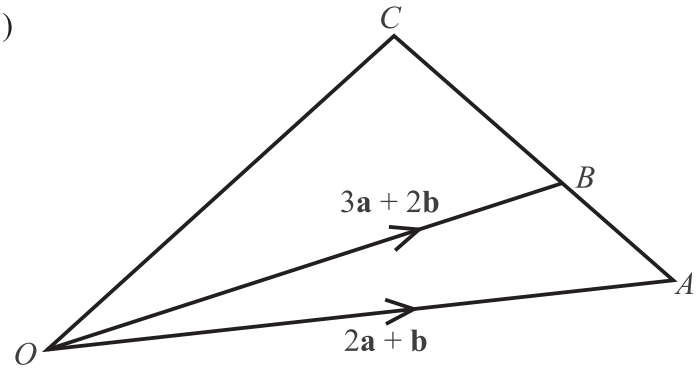
10)



This is a picture of a cuboid.

Calculate angle PBS.
Give your answer to 3 significant figures. _____° **5**

11)



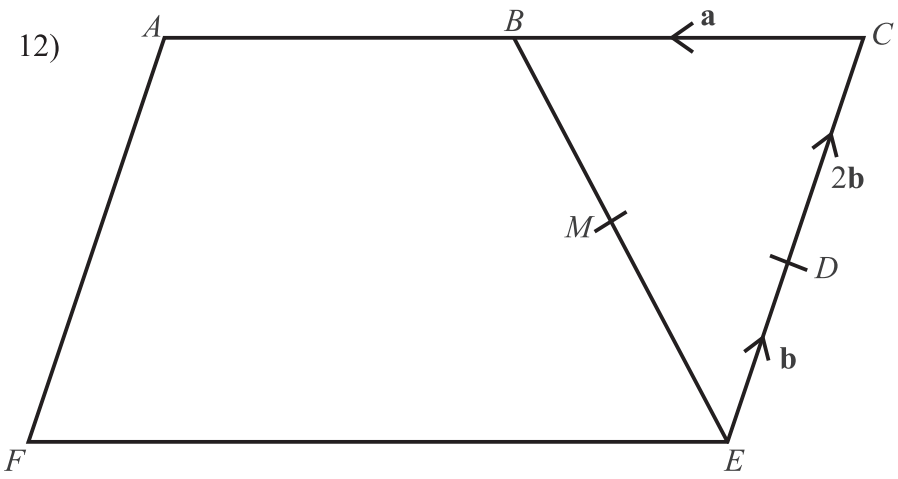
ABC is a straight line and $AB : BC = 2 : 5$

$\overrightarrow{OA} = 2\mathbf{a} + \mathbf{b}$

$\overrightarrow{OB} = 3\mathbf{a} + 2\mathbf{b}$

Express $\overrightarrow{OC}$ in terms of **a** and **b**
Give your answer in its simplest form. **4**

12)



$ACEF$ is a parallelogram.

B is the midpoint of AC.

M is the midpoint of BE

$\overrightarrow{CB} = \mathbf{a}$ $\overrightarrow{ED} = \mathbf{b}$ $\overrightarrow{DC} = 2\mathbf{b}$

Show that AMD is a straight line. **5**