Name:_____

GCSE (1 - 9) Trigonometry in 3D	Solutions:

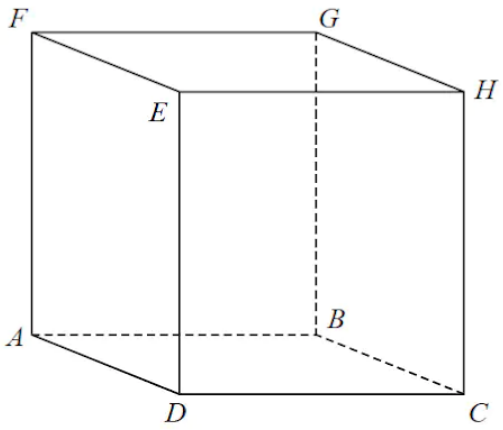
These questions represent all of the times that this topic has appeared in unlocked Pearson Edexcel GCSE maths papers.

Question	Where the question appeared
1	Edexcel, GCSE, Summer 2018, Paper 2H, Q18
2	Edexcel, GCSE, Autumn 2018, Paper 3H, Q12
3	Edexcel, GCSE, Summer 2019, Paper 2H, Q19

Trigonometry in 3D Questions from Past Papers

1

ABCDEFGH is a cuboid.



$AB = 7.3\,\text{cm}$
$CH = 8.1\,\text{cm}$
Angle $BCA = 48°$

Find the size of the angle between AH and the plane $ABCD$.
Give your answer correct to 1 decimal place.

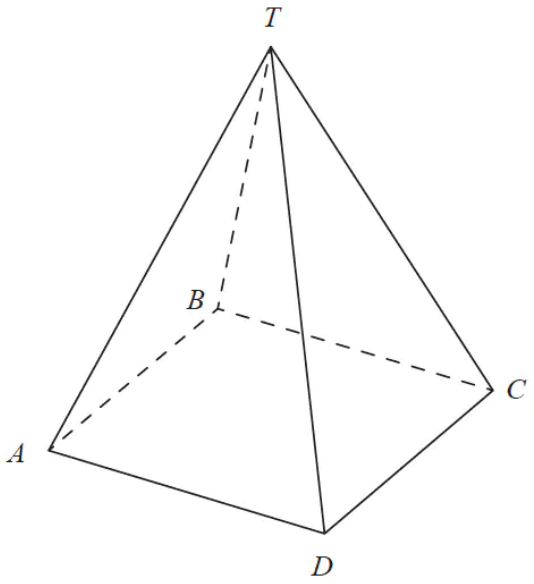
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(Total for Question 18 is 4 marks)

[Edexcel, GCSE, Summer 2018, Paper 2H, Q18]

2

Here is a pyramid with a square base $ABCD$.



$AB = 5\,\text{m}$

The vertex T is 12 m vertically above the midpoint of AC.

Calculate the size of angle TAC.

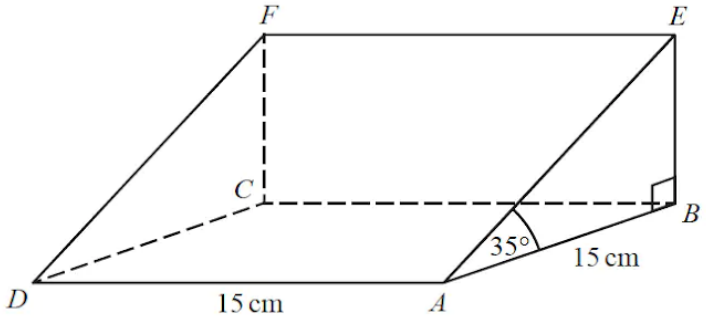
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(Total for Question 12 is 4 marks)

[Edexcel, GCSE, Autumn 2018, Paper 3H, Q12]

3

The diagram shows a triangular prism.



The base, $ABCD$, of the prism is a square of side length 15 cm.
Angle ABE and angle CBE are right angles.
Angle $EAB = 35°$

M is the point on DA such that

$$DM : MA = 2 : 3$$

Calculate the size of the angle between EM and the base of the prism.
Give your answer correct to 1 decimal place.

.....°

(Total for Question 19 is 4 marks)

[Edexcel, GCSE, Summer 2019, Paper 2H, Q19]