**3D Pythagoras’ Theorem GREEN**



The diagram represents a cuboid $ABCDEFGH$.

$AB=28$ cm. $BC=12$ cm. $CH=16$ cm.

Calculate the length of $AH$.

…………………cm

**(4 marks)**



The diagram represents a pyramid $ABCDE$ with height $EF$*.*

$AB=6.3$ cm. $BC=3.2$ cm. $EF=7$ cm. $CE=x$ cm.

Calculate $x$.

…………………cm

**(4 marks)**

**3D Pythagoras’ Theorem AMBER**



The diagram represents a cuboid $ABCDEFGH$.

$AB=28$ cm. $BC=12$ cm. $CH=16$ cm.

Calculate the length of $AH$.

…………………cm

**(4 marks)**



The diagram represents a pyramid $ABCDE$ with height $EF$*.*

$AB=6.3$ cm. $BC=3.2$ cm. $EF=7$ cm. $CE=x$ cm.

Calculate $x$.

…………………cm

**(4 marks)**

**3D Pythagoras’ Theorem RED**



The diagram represents a cuboid $ABCDEFGH$.

$AB=28$ cm. $BC=12$ cm. $CH=16$ cm.

Calculate the length of $AH$.

Start by using Pythagoras’ Theorem with triangle ABC to calculate length AC.

Then use Pythagoras’ Theorem with triangle ACH to calculate length AH.

…………………cm

**(4 marks)**



The diagram represents a pyramid $ABCDE$ with height $EF$*.*

$AB=6.3$ cm. $BC=3.2$ cm. $EF=7$ cm. $CE=x$ cm.

Calculate $x$.

Start by using Pythagoras’ Theorem with triangle ABC to calculate length AC.

Divide AC by 2 to calculate length FC.

Then use Pythagoras’ Theorem with triangle CEF to calculate x.

…………………cm

**(4 marks)**