**3D Coordinates GREEN**

Question 1



The diagram shows a cuboid drawn on a 3D grid.

Three of the vertices of the cuboid are $P (3, 2, 0)$

 $Q (3, 0, 0)$

 $R (3, 0, 4)$

a) Label the vertex $Q$ with a cross (×).

The vertex S is shown on the diagram.

b) Write down the coordinates of the vertex $S$.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Calculate the volume of the cuboid.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ units2

Question 2



The diagram shows a cuboid drawn on a 3D coordinate grid.

The vertex $N$ of the cuboid has coordinates $(6, 2, 4)$.

a) What are the coordinates of the vertex $R$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) What are the coordinates of the midpoint of the line segment $RN$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) What are the coordinates of the midpoint of the line segment $RQ$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3D Coordinates AMBER**

Question 1



The diagram shows a cuboid drawn on a 3D grid.

This is your worksheet. Draw all over that diagram to include the information you’ve been given!

Three of the vertices of the cuboid are $P (3, 2, 0)$

 $Q (3, 0, 0)$

 $R (3, 0, 4)$

a) Label the vertex $Q$ with a cross (×).

The vertex S is shown on the diagram.

b) Write down the coordinates of the vertex $S$.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Calculate the volume of the cuboid.

What are the dimensions of the cuboid?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ units2

Question 2



The diagram shows a cuboid drawn on a 3D coordinate grid.

The vertex $N$ of the cuboid has coordinates $(6, 2, 4)$.

a) What are the coordinates of the vertex $R$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) What are the coordinates of the midpoint of the line segment $RN$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) What are the coordinates of the midpoint of the line segment $RQ$?

Start by working out the coordinates of point $Q$.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3D Coordinates RED**

Question 1



The diagram shows a cuboid drawn on a 3D grid.

This is your worksheet. Draw all over that diagram to include the information you’ve been given!

Three of the vertices of the cuboid are $P (3, 2, 0)$

 $Q (3, 0, 0)$

 $R (3, 0, 4)$

a) Label the vertex $Q$ with a cross (×).

The vertex S is shown on the diagram.

b) Write down the coordinates of the vertex $S$.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Calculate the volume of the cuboid.

What are the dimensions of the cuboid?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ units2

Question 2



The diagram shows a cuboid drawn on a 3D coordinate grid.

The vertex $N$ of the cuboid has coordinates $(6, 2, 4)$.

a) What are the coordinates of the vertex $R$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) What are the coordinates of the midpoint of the line segment $RN$?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) What are the coordinates of the midpoint of the line segment $RQ$?

Start by working out the coordinates of point $Q$.

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