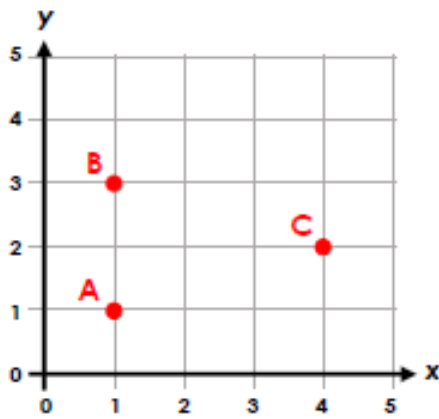


Bronze

1a. Write the coordinates of all the marked points on the grid.



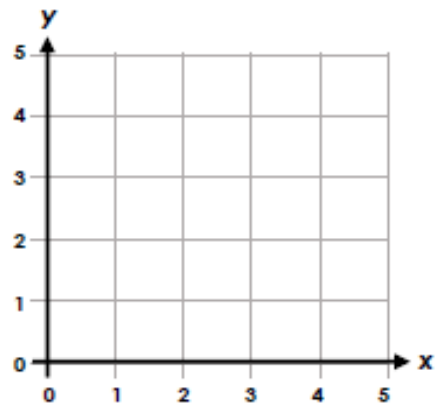
A B C



VF

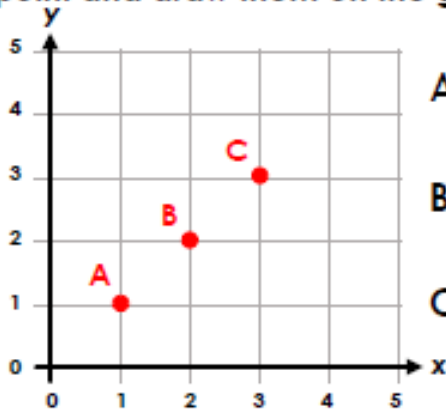
1b. The coordinates below will create one letter. Draw and join them on the grid to find out the letter.

$(3, 1) (3, 3) / (2, 3) (4, 3)$



PS

2a. Each point moves one square up. Write the new coordinates of each new point and draw them on the grid.

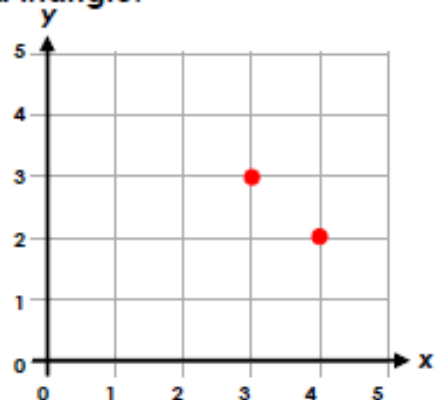


A
 B
 C



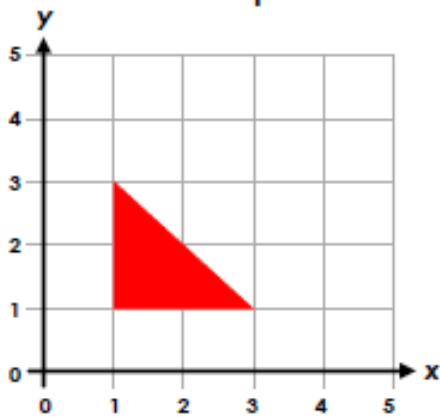
VF

2b. Two coordinates out of three have already been plotted. Write the rest of the coordinates and join them on the grid to create a triangle.

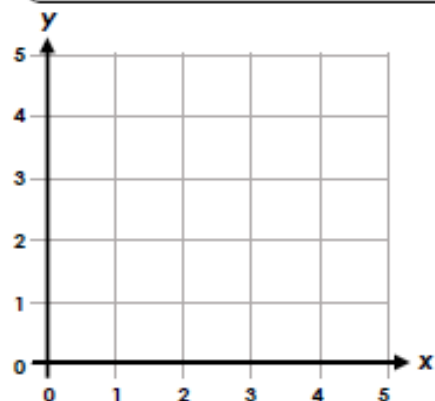


PS

3a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.

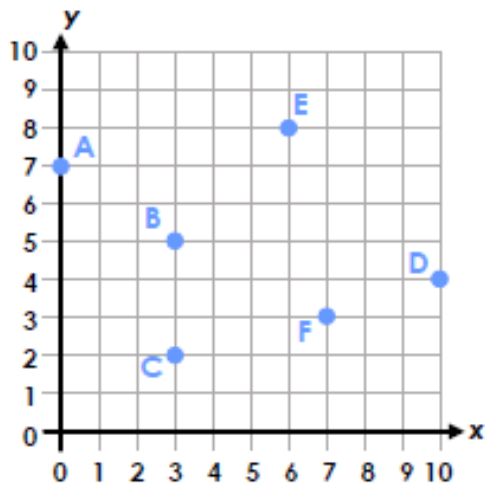


$(3, 4) (2, 4) (1, 4)$ is a straight line, the next point on the left would be $(0, 4)$ or $(4, 4)$.



PS

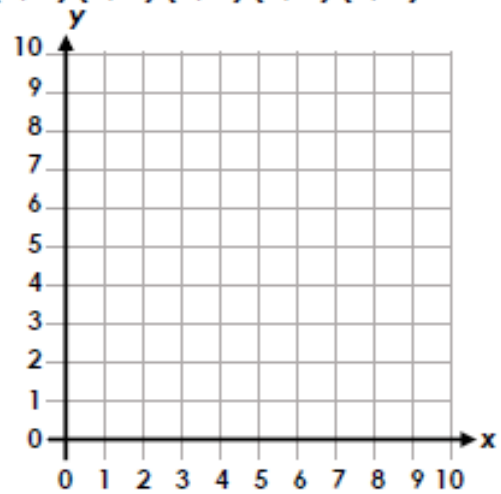
4a. Write the coordinates of all the marked points on the grid.



VF

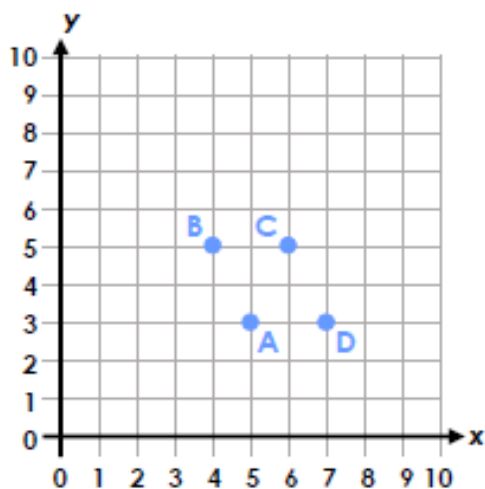
4b. The coordinates below will create a letter. Draw and join them on the grid to find out the letter.

(2, 7) (1, 7) (1, 6) (2, 6) (2, 5) (1, 5)



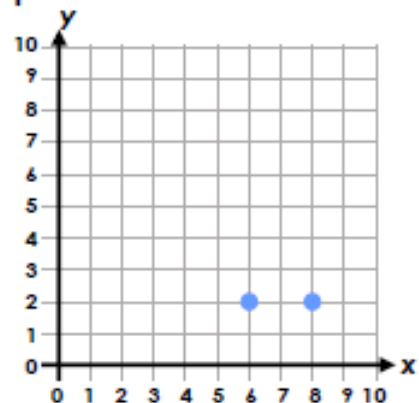
PS

5a. Each point moves two squares up. Write the new coordinates of each point.



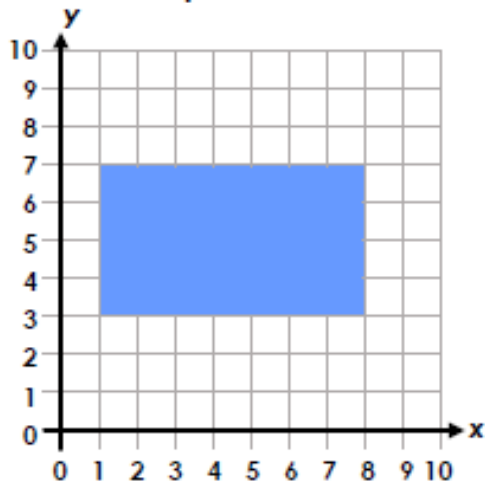
VF

5b. Two coordinates out of four have already been plotted. Write the rest of the coordinates and join them on the grid to create a quadrilateral.



PS

6a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.

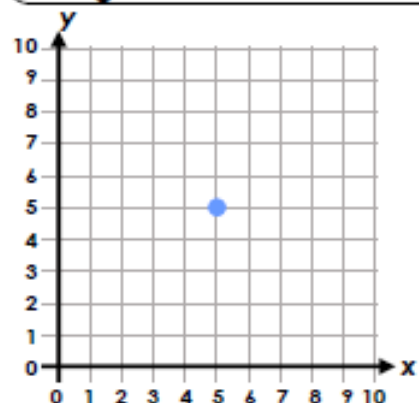


VF

6b. True or false? Explain your answer.



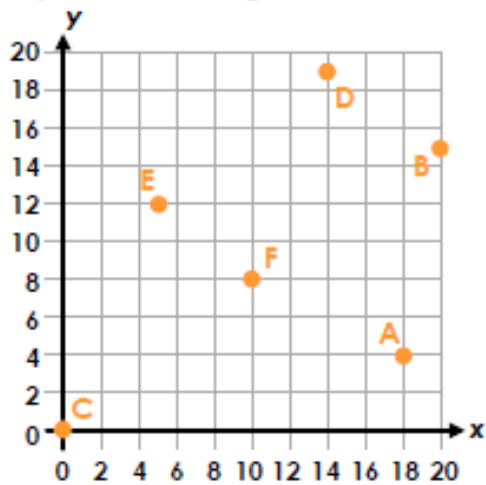
If only one value changes in a new coordinate, it will make either a horizontal or vertical straight line from where it was.



R

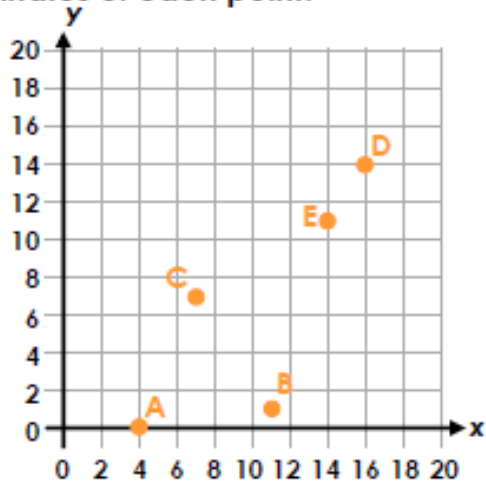
Gold

7a. Write the coordinates of all the marked points on the grid.



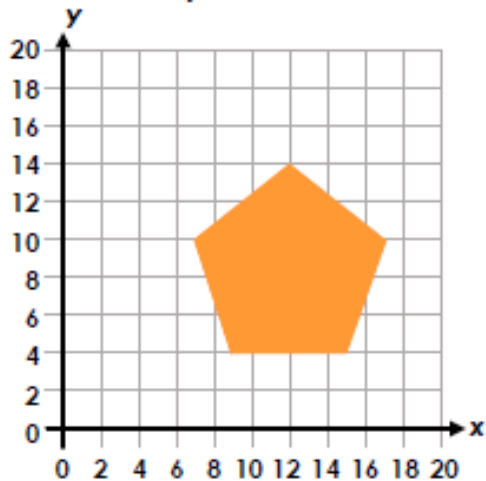
VF

8a. Each point moves one square left and three squares up. Write the new coordinates of each point.



VF

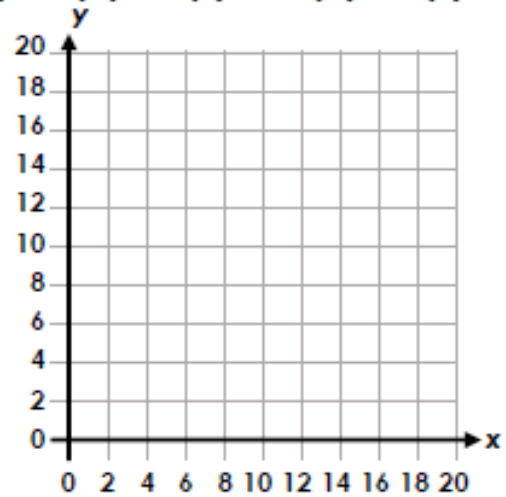
9a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



VF

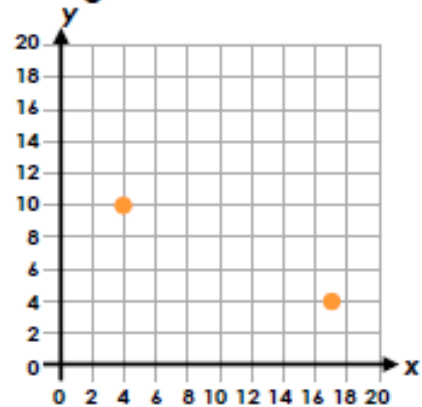
7b. The coordinates below will create a letter. Draw and join them on the grid to find out the letter.

$(6, 2)$ $(6, 18)$ $(14, 2)$ $(14, 18)$ $(6, 11)$ $(14, 11)$



PS

8b. Two coordinates out of six have already been plotted. Write the rest of the coordinates and join them on the grid to create a hexagon.



PS

9b. True or false? Explain your answer.

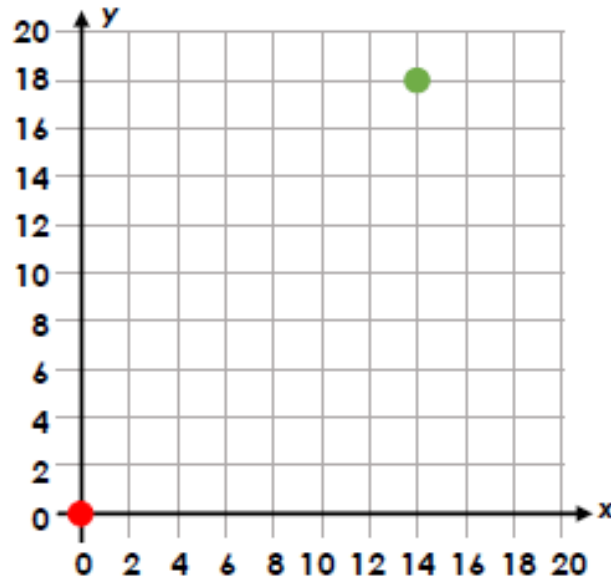


If your shape touches the top of the grid you cannot move it up any further.

Challenge

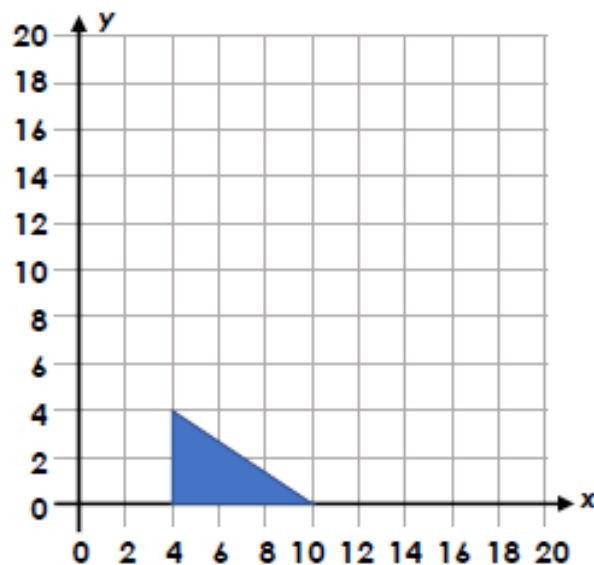
1. Ethan is playing a game. He starts at the coordinates $(0, 0)$ and must reach $(14, 18)$. He must make seven different movements and is only allowed to travel vertically and horizontally on the grid lines.

Explore the different routes that would work.



2. Create a quadrilateral that shares a coordinate with the triangle on the grid below. The shapes cannot overlap.

Once complete, repeat the step so that another triangle shares one of the coordinates of the quadrilateral.



Investigate how many times you could repeat this process before you run out of space on the grid.