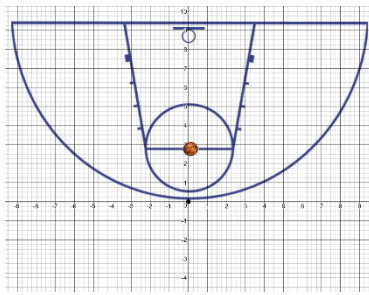


Name : _____



Date : _____

WEEK 5
Cartesian Plane

Ballmatics – What's Your Best Shot?

What is an xy-plane?

Explain what each term means:

The horizontal axis is called the _____.

The vertical axis is called the _____.

The centre point is called the _____.

Now, label the three terms on the xy-plane shown:

How can you explain the location of the 🏀?

Steps when finding points on the xy-plane:

1. Start at the _____.

2. Move: _____

3. Move: _____

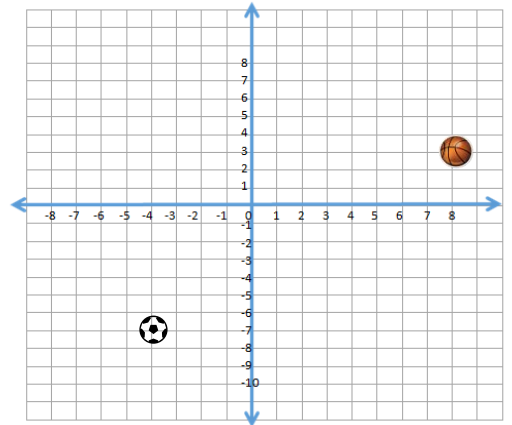
The point is represented in brackets:

🏀 : (_____ , _____)

⚽ : (_____ , _____)

The numbers in brackets are called the _____

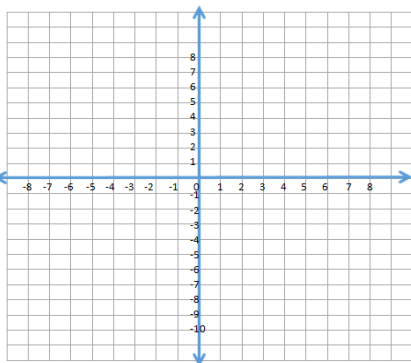
Now you try! What's your favourite emoji: _____. Find point (6,7) on the xy-plane above and draw your favourite emoji!



AT THE MATH STATION - PRACTICE

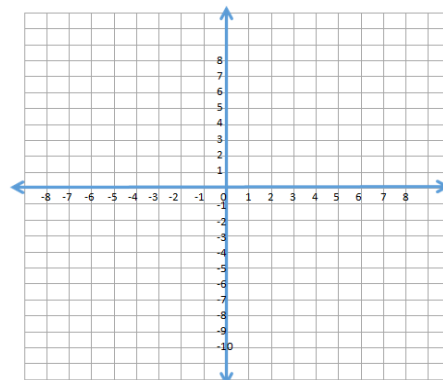
Plot the following points on the xy-plane below, connect them & name the shape!

A (-4, 3) B (-4, 5) C (3, -5) D (3, 3)



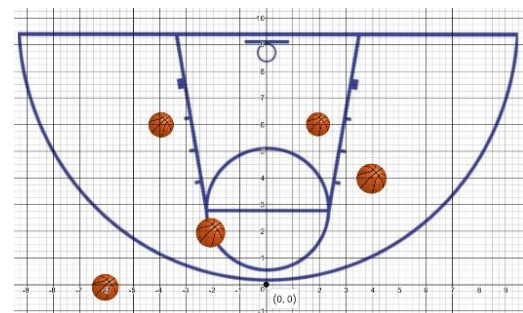
SHAPE : _____

A (2,1) B(2,2) C(3,3) D(4,3) E(5,2)
F(5,1) H(4,0) I(3,0)



SHAPE : _____

Identify the coordinates of all the basketballs.

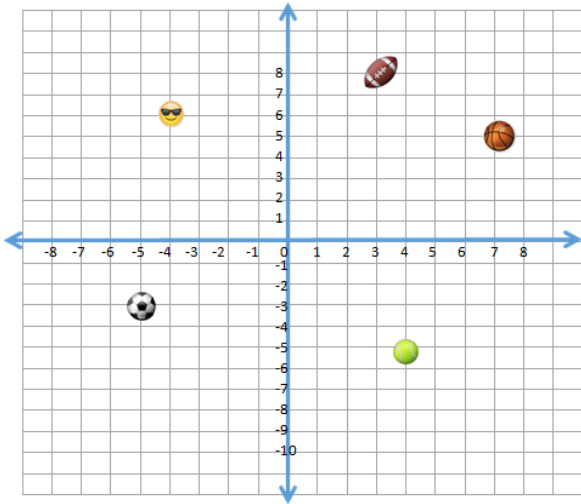


Coordinates :

(_____ , _____) (_____ , _____)

(_____ , _____) (_____ , _____)

More practice! Determine the coordinates for each emoji on the xy-plane below, then reflect them on the x-axis.

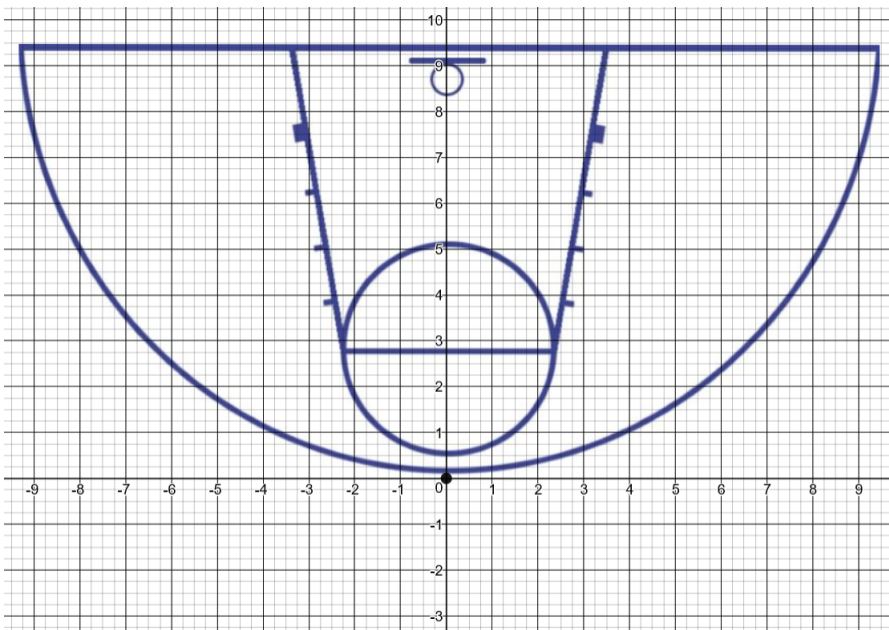


🕶️ : (__ , __) 🏈 : (__ , __)
 🏀 : (__ , __) ⚽ : (__ , __)
 🎾 : (__ , __)

Next, reflect each emoji on the x-axis. Write the new coordinates.

🏀 : (__ , __) 🏈 : (__ , __) ⚽ : (__ , __)
 🕶️ : (__ , __) 🎾 : (__ , __)

ON THE COURT - Where is your best shot at?



You will be given several coordinate pairs. You must correctly write down the location before you can attempt to shoot. Then, label all points on the xy-plane as follows:

Use ● for the baskets you make

Use ✕ for the baskets you miss.

The points where I made the baskets:

(__ , __) (__ , __)
 (__ , __) (__ , __)
 (__ , __) (__ , __)
 (__ , __) (__ , __)

Questions:

- Where on the xy-plane is your best shooting location? Give a possible coordinate as the answer. _____
- Pick any 4 coordinate pairs above and reflect them on the x-axis. Write the old and new coordinates below:

Coordinate pairs I picked: (__ , __) (__ , __) (__ , __) (__ , __)

Coordinates AFTER reflecting on x-axis: (__ , __) (__ , __) (__ , __) (__ , __)

Extra practice:

- Is the point (5,3) the same as the point (3,5)? Explain.
- Denzel plotted the three points on the coordinate plane on the right.
 - Give the coordinates of points A, B and C.
 A (__ , __) B (__ , __) C (__ , __)
 - Denzel plots point D and connects the four points to form a rectangle. What is the perimeter of rectangle ABCD?
 - Reflect points A and B on the x-axis. Write the new coordinates:
 point A reflected on x-axis: (__ , __) point B reflected on x-axis: (__ , __)
 - What do you notice about the coordinates when you reflect them on the x-axis?

