

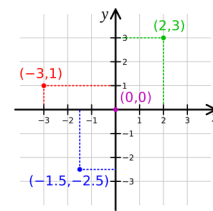
Explore the Cartesian Plane!

Plotting Points on a Cartesian Plane

The **Cartesian Plane**, named after French mathematician Rene Descartes who invented it, uses two perpendicular lines. One is called the x axis and the other is called the y axis.

Point locations are found using a pair of numbers called **coordinates** or **ordered pairs**.

The first number is the x and the second number is the y.



To find the point, or coordinate, **(2, 3)**, slide your finger **ACROSS** the x axis until you find the number **2**, and then slide your finger **UP** until you find the number **3** on the y axis.



Activities by Age/Grade:

Early Elementary Scavenger Hunt: Using the attached Cartesian Plane, write the names of the objects you find at each coordinate.

(0, 0) _____ (4, 4) _____
 (2, 8) _____ (6, 2) _____

Try the next one!!



Mid-Late Elementary: Draw a point on the following coordinates on the attached Cartesian Plane.

A(9, 3) B(9, 6) C(6, 6) D(6, 3)

Label each point with its letter and connect the points.

What shape do you see? _____


What are the lengths of the line segments?

AB: _____ BC: _____

CD: _____ DA: _____

What is the **Area** of the shape? ($A = l \times w$) _____ units squared

Try the next one!!



Middle School: Draw a point on the following coordinates on the attached Cartesian Plane.

F(3, 10) G(3, 7) H(7, 7) Label the points and draw lines to connect them.

What shape do you see? _____

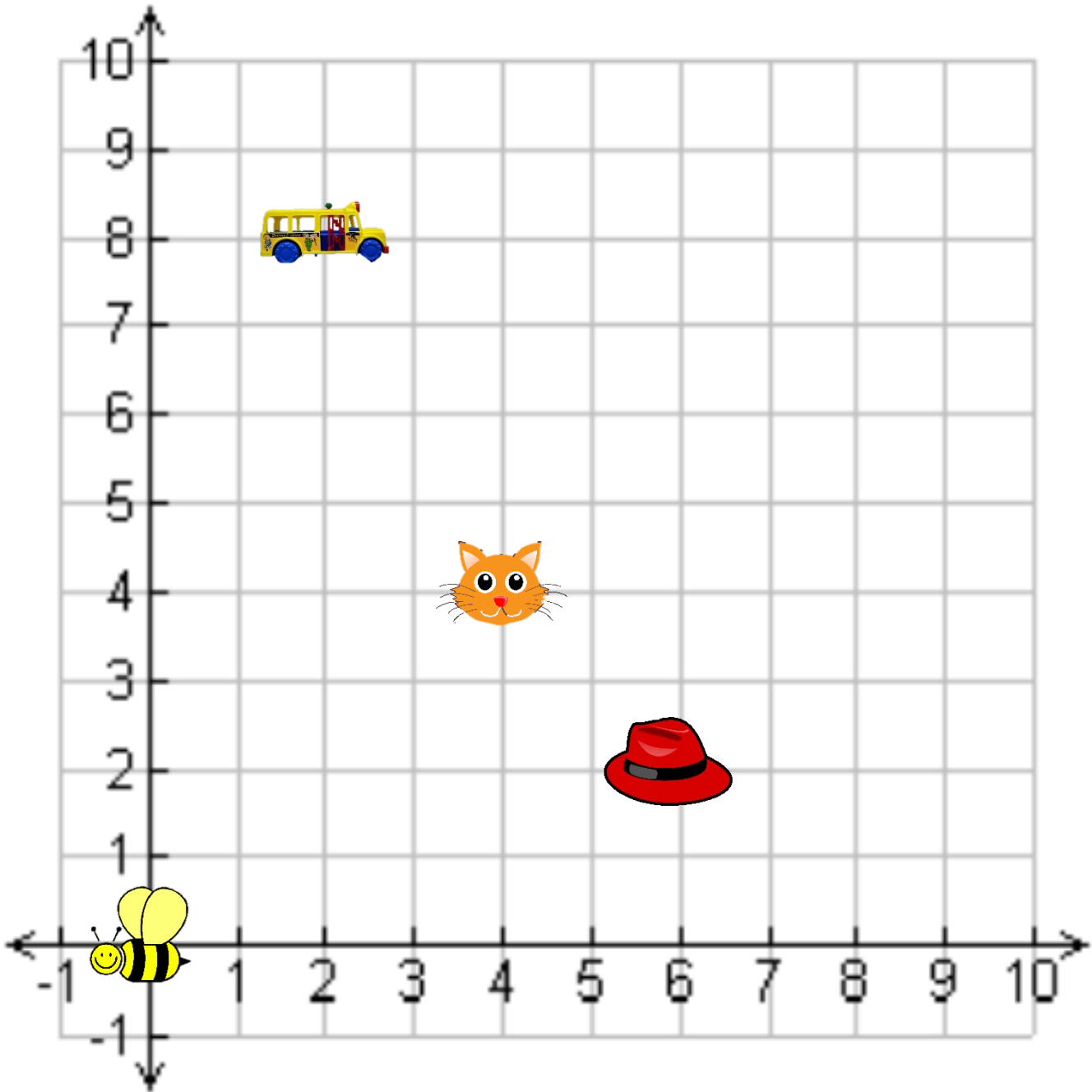
What are the lengths of the line segments? FG: _____ GH: _____

Use the **Pythagorean Theorem** and a calculator to find the **exact length** of FH.

The length of line segment FH is: _____ units.

Pythagorean Theorem $a^2 + b^2 = c^2$

Use the Cartesian Plane below to answer the questions from page one:



For more information go to: **Agora.org**
or call: **844-462-4672**