

Name: _____

Date: _____

**Bulletin Board Extra Credit: Activities on the Cartesian Plane**

Completing this activity will add a maximum of 10 bonus points to your next test. You must answer the final question to receive any credit.

Directions:

To start, write the following formulas for the area of each shape:

Square: _____

Triangle: _____

Rectangle: _____

Trapezoid: _____

Next, pick an index card from the envelope labeled 'Points to Plot.' Then take as many files from the 'Flies' envelope as necessary and tack them to the indicated points on the card. Once you have plotted all the points on the card, take a rubber band and stretch it around the flies to form a shape. Then begin filling in the answers below for the appropriate color card. You must show your work for how you computed the area. Each tick mark on the coordinate plane represents one unit, so your units will be units². Once you have completed the information for that colored card, carefully remove the rubber band and the flies. Then pick a different colored card and repeat the process. You will repeat the process for all five different colored cards, thus completing the activity.

Remember, distance is never negative. And don't forget to answer the very last question at the end!

Pink Card

Shape formed:

Area:

Quadrant(s) the shape falls in:

Green Card

Shape formed:

Area:

Quadrant(s):

Blue Card

Shape formed:

Area:

Quadrant(s):

Yellow Card

Shape formed:

Area:

Quadrant(s):

Purple Card

Shape formed:

Area:

Quadrant(s):

How did Descartes come up with the idea for the coordinate plane?