

Comet Comments—



Coloma High School Newsletter

Principal, Mr. David A. Ehlers

March 2017

MISSION STATEMENT:

*We will inspire all students to achieve at high levels
and empower them for their future success.*

INSPIRE TO ACHIEVE –EMPOWER FOR SUCCESS



FROM THE DESK OF DAVID A. EHLERS



The 3rd marking period is officially in the books! You will receive your student's report card as soon as we return from Spring Break!

As soon as we return from Spring Break, we will be focusing on the state testing cycle. All students 9 -11 have to take some form of test and juniors have to take three different tests. These tests are mandatory for all our students. Please help ensure your student is well rested and shows up ready to test, on time, on the day when she/he is scheduled to test. You should have received a letter this week with your student's testing schedule. We will send out reminders the night before the testing days. If you have any questions, please call the high school office or email me directly.

I hope everyone has a safe and restful Spring Break!

GO COMETS!!

COUNSELOR'S CORNER by Mrs. Fran Megyese

DEAR PARENTS:

EVERY YEAR AT THIS TIME WE STRUGGLE WITH SENIORS GETTING SENIORITIS WHEN IT COMES TO SCHOOL. AFTER MEETING WITH SEVERAL TEACHERS THEY CLAIM THE BIGGEST PROBLEM IS STUDENTS ARE NOT BEING RESPONSIBLE FOR MISSING ASSIGNMENTS, QUIZZES, TESTS AND ATTENDANCE.

I WILL CONTINUE TO MEET WITH SENIORS IN JEOPARDY AND MAINTAIN CONTACT WITH THEIR PARENTS BY PHONE AND/OR CORRESPONDENCE.

IF YOU ARE HAVING TROUBLE MONITORING YOUR STUDENTS PROGRESS ON POWER SCHOOL PLEASE CALL MRS. PAULSEN, SHE WILL HELP YOU WITH THIS PROCESS.

UPCOMING DATES FOR APRIL

April 10
Return from Spring Break

April 11
Report Cards

April 11, 12, 13 –
Mandatory Testing (more
information on page 2)

April 12
2-hour late start 10:00 am

April 14
Good Friday—1/2 day

April 25
National Honor Society—
HS Auditorium @ 6:30
p.m.

Senior pictures in cap and
gown by Lifetouch, order
forms available in HS
Office

April 26
2-hour late start 10:00 am

April 29
Junior/Senior Prom



MANDATORY SPRING TESTING DATES 2016-17

IMPORTANT DATES FOR APRIL

Please mark your calendar!!

April 11 **NO SCHOOL for 12th grade**

11th grade SAT Testing
10th grade PSAT Testing
9th grade PSAT Testing

April 12 11th grade — ACT Work keys — Report to HS
cafeteria at 7:35 am — Must provide own
transportation to school
Buses will run for the **2 hour late start** for 9th,
10th and 12th grades

April 13 11th grade M-STEP Social Studies and Science
Normal day for 9th, 10th and 12th grades
School starts at 8:00 am
Chromebooks need to be charged!

**TARDY STUDENTS WILL NOT BE
ADMITTED FOR TESTING.
MAKE SURE YOU ARE ON TIME !!**



HISTORY CLASS NOT JUST MEMORIZING DATES

by Curt Mead

Here at Coloma High School, our history teachers are doing more than just teaching historical dates and events to their students. Students are engaged in many activities with differentiated learning in history classes. Most of these activities help students learn and fine tune their skills as a young historian. Some of the skills being taught in history classes are: reading maps, reading timelines, examining data, analyzing primary and secondary sources and writing history “in your own context”. Through mapping exercises students are able to examine a map and determine where events happened and why they occurred in that area. Students also learn to analyze timelines and sort through information, and dates to link events through cause and effect. Students look at many different types of primary sources as a part of history classes as well. This can vary from Laws and Acts from Congress to political cartoons of the time period. Students learn to closely examine primary sources by determining what type of source the document is, who wrote it, who the main audience is and what it means. Students can then use that information to once again write history into their own context. There are many ways to teach these skills to students one of the ways the history department has done this is through skill stations in class. These skill stations allow students to move around the class to different stations set up by the teacher where students work on different exercises building their skills as a young historian

Students working at the different skill stations in Mr. Mead’s World History class:





Drafting/Engineering Student Delves into Crime by Grant Kroschel

My name is Grant Kroschel and I am a senior at Coloma High School. Currently, I am enrolled in the GIS class taught by Dr. Dale Quattrin. GIS stands for Geographic Information Systems and refers to a type of computer program that uses and analyzes spatial data to create maps based on the data.

I am working on researching crime rate and factors that correlate with it. Along with the assistance of Mr. Joseph Stephens, Dr. Quattrin and I investigated several different independent variables to see if it would correlate with a dependent variable. The baseline for our dependent variable is the crime rate by county across the state of Michigan for the year of 2015. Our hypothesis initially was that there was a correlation between crime rate and the unemployment rate. Many politicians will blame the fluctuations of crime based on the availability of jobs. With our data, we found that there was not a statistical correlation between these two variables. We then analyzed whether the labor participation rate was a factor of the crime rate. The labor participation rate is the percentage of people who do not have jobs. It is similar to the unemployment but it also includes people who have left the job market but are in the 16-68 year old range. Through our analysis of data, we determined that there was not a statistical correlation between the crime rate and this factor either.

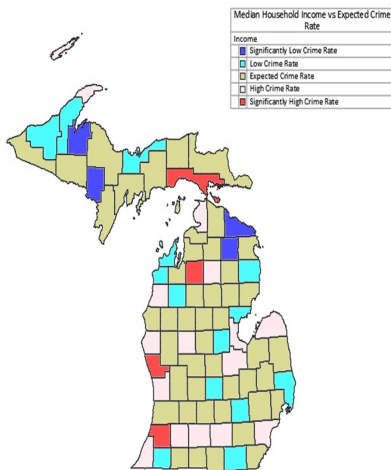


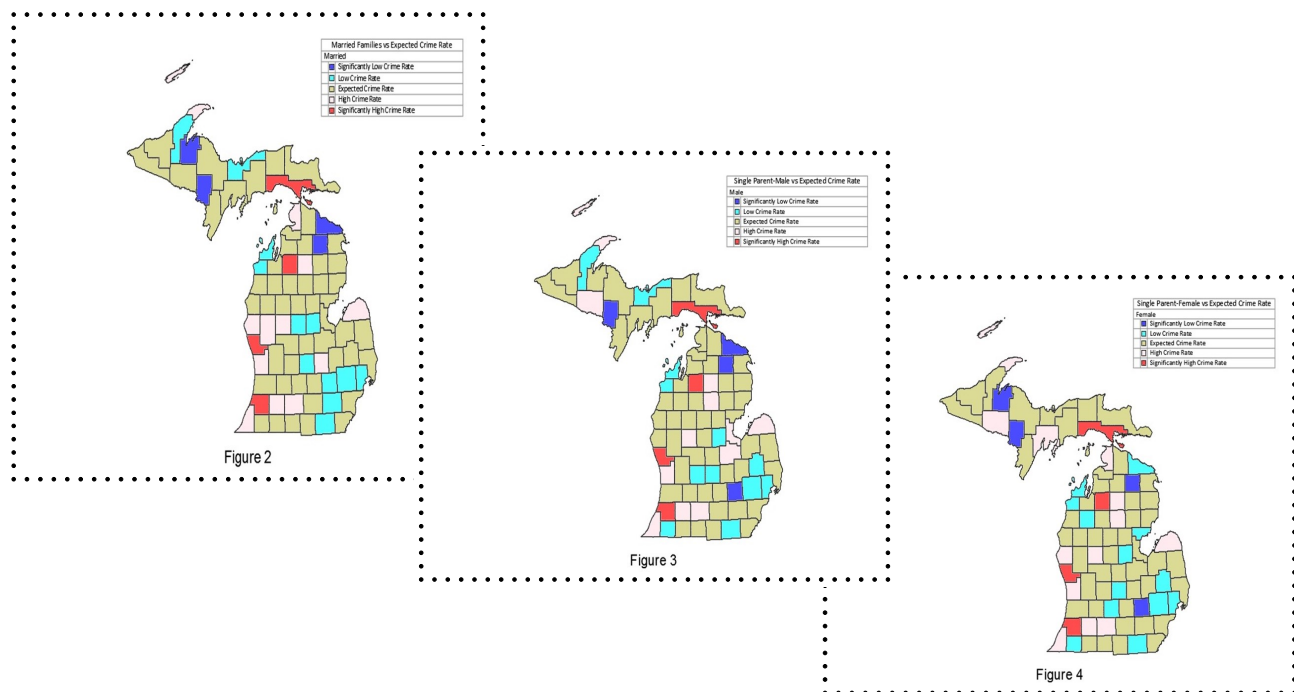
Figure 1

Looking for other factors, we hypothesized and tested whether the median household income by county as an independent variable correlated with the crime rate. When comparing the data one would expect a negative relationship. This means that a higher household income resulted in less crime and a lower income meant a higher crime rate. The result of our analysis demonstrated a negative statistically significant correlation between median household income and crime. This supports our hypothesis. **Figure 1** displays the median household income vs the expected crime rate. To determine each county's corresponding color we used our line of best fit and calculated each county's expected crime rate given the median household income of that county. We then subtracted the expected crime rates from the actual crime rates to determine each county's deviation from the line of best fit. The dark blue color in this map represents a county that has a much lower crime rate than what is expected from its median household income. Our yellow color represents a county that have an actual crime rate that is very close to what we would expect. The red color represents a county that have much higher crime rates than we would expect from their median household income.

Crime rate is clearly not the result of just one factor. This led us to hypothesize whether the different types of households correlated with the crime rate. The first type of household used as our independent variable was family households with married parents. In this comparison, we would expect a negative relationship. As the percentage of married family households increases, the crime rate should decrease and vice versa. Our test results supported our hypothesis of a negative statistically significant correlation between the percentage of married family households and the crime rate. The second type independent variable used was male-single parent households. A positive relationship between male-single parent households and crime is what we hypothesized. This meant that as the percentage of male-single parent households increased, the crime rate would also and vice versa. The results showed a positive statistically significant correlation between the percentage of male-single parent households and the crime rate. Therefore, our hypothesis was supported. The last independent variable that we used was the percentage of female-single parent households. Our hypothesis for this variable was a positive relationship with the crime rate. Testing our hypothesis, our result was that as the percentage of female-single parent households increased so did the crime rate. This meant that our hypothesis was supported. Female-single parent households also demonstrated a stronger statistically significant correlation of 0.34609 than the male-single parent households of 0.31512.



Our corresponding maps help display and compare the differences in crime rate. **Figure 2** represents the comparison of the percentage of married family households versus the expected crime rate. The dark blue color represents a county that has a much lower crime rate than what is expected relative to its percentage of married family households. Yellow colors represent a county where their actual crime rate is very close to what we would expect the crime rate to be. Red colors represent a county that has a significantly higher crime rate than what is expected from that county's percentage of married family households. **Figure 3 and 4** show single parent-male households and single parent-female households relative to the expected crime rate. Both maps represent a positive correlation. This means that both maps show that a county with a higher percentage of single parent-male or single parent-female has a higher crime rate. The dark blue color represents a county that has a much lower crime rate than expected. Yellow colors represent a county where their actual and expected crime rates are very similar. The red color represents counties with a much higher crime rate than we would expect for its percentage of single parent households.



In summary, across the state of Michigan, crime rate is affected by several factors. There are negative statistical correlations between the median household income and the percentage of married family households with the crime rate. We also had positive statistical correlations with single parent-male and single parent-female with the crime rate. However, we did come across two independent variables that had no statistical correlation when they were expected to. These two variables were the unemployment rate and the labor participation rate.

We might hypothesize that lower median household incomes result with in a greater percentage of petty crimes. Another hypothesis stating that counties with a higher income could afford better security services would be reasonable. Further investigation will be needed to come to a final conclusion on the causation. With our married family households' correlation, one could hypothesize that crime is affected by the stability of a household. For single parent households, we can hypothesize that crime rate is affected by the possible less stable structure of this type of household. Since there is a higher correlation between single parent-female household and the crime rate as opposed to male households, there must be a reason. Social scientists have suggested that crimes are more likely to be committed by males raised without a consistent male role model in their household growing up. To come to this conclusion, we would have to further our investigation into factors affecting single parent households.

The next step in our research will be to investigate why certain counties had better or worse results than others. A factor that we may be able to test is the county's type of geographic designation (e.g. urban, rural, city). We might get this from population density calculations. This project started out researching the validity of issues that politicians run their campaign on. With this study we can start to distinguish fact and political agenda.



*DAR - Good Citizen Contest Winner:
Grant Kroschel*

The Algonquin Chapter of the daughters of the American Revolution was established in 1898 and has been holding its Good Citizens contest since 1934. Grant is an athlete and volunteers at Lakeland Medical Center and the North Berrien Senior Center. He plans to attend Michigan State University and major in Business Administration.

March Facts.....

- March is named after Mars, the Roman god of war as it was the month in which the military campaigning season got under way after winter.
- In Old English one name for the month of March was “Hlyda” meaning “loud” possibly because of the roaring March winds.
- March is the only month with three consecutive consonants in its name in English.
- An old proverb says that “March comes in a like a lion and goes out like a lamb”, which means that winter is ending and spring is beginning.
- In ancient Rome before Julius Caesar’s calendar reform, March was the first month of the year.
- Fredric March twice won an Oscar for Best Actor. *Main Street* On The March (1941) and *March Of The Penguins* (2005) also won Oscars.
- MARCH is an acronym for the Medically Aware and Responsible Citizens of Hyderabad.
- The birthstone for March is aquamarine and the flowers are the daffodil or violet.
- More 20th century UK Prime Ministers had birthdays in March than any other month.

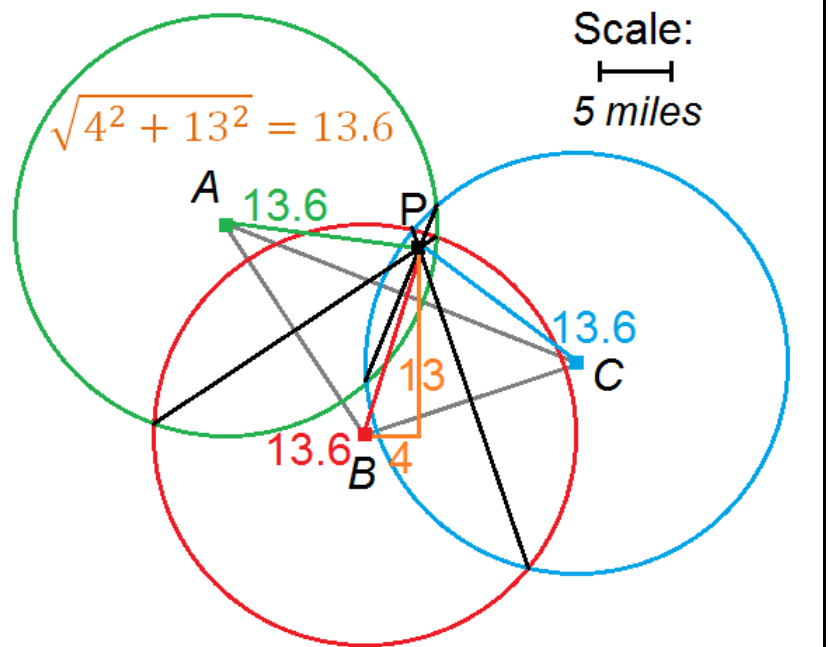


Math Department News: Circumcenters

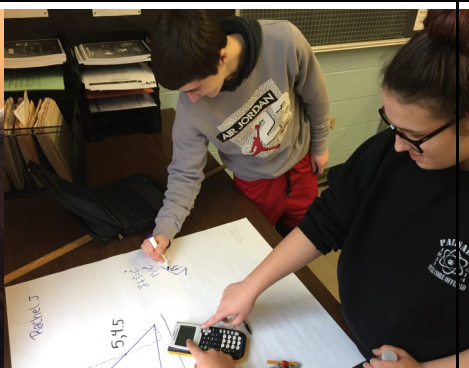
By Brian Klee

A regular theme in Geometry is applying the concepts to the real world. One such example is the construction of the circumcenters of a triangle. Real world applications would include any situation in which it would be ideal to make sure that a specific location was equidistant to three other locations. One possible example is the location of a park so that it is equidistant from three apartment complexes which all geometry students solved. Other examples could be the location of a power plant so that it powered three towns, the location of a distribution center for three stores or the location of a radio tower to broadcast clearly to three cities.

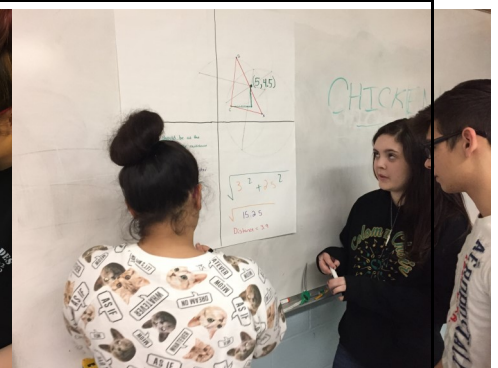
The diagram to the right shows an example in which the point "P" would perhaps represent the ideal location to construct a power plant equidistant from towns represented by points "A", "B" and "C". To find this location, three circles with equal radii are drawn with each town as the centers. Then perpendicular bisectors are drawn through the intersections of these circles. The point of intersection of these three lines is called the circumcenter and is shown as point "P" representing where it would perhaps be best to construct the power plant because as shown by Pythagorean Theorem, this is a point that is about 13.6 miles away from each town.



Autymn Haney and Antonio Gagliardo carefully line-up the ruler to mark a perpendicular bisector.



Rachel Jenkins calculates a distance as Cody Dahlquist records the work and answer.



Shelby Gipson, Conor Hutchins-Linderman and Riley Cole check that their solution is accurate.



COLOMA HIGH SCHOOL MARCH STUDENTS OF THE MONTH !!

Congratulations to:
(l-r) Freshman-Dalton Turner, Sophomore-Zack Lake,
Junior-Kayla Yore, Senior-James Jones



APRIL 3-7



Did you know?... Spring break is known, among other names as March break, Mid-Term Break, study week or the Easter holidays. Spring break is celebrated in the United States. It is a recess from most schools and universities.