

Solanum Virus Loose in Wyandotte

Name:

Hour:

Last Week - BREAKING NEWS: Strange behavior at University of Michigan last week has been linked to a new virus, called *Solanum*, being researched in university labs. University officials are strongly advising that students remain in their homes and away from anyone who may be infected. Those who have been infected can be distinguished from others by a distinct red mark on their hands. Anyone with these red marks is infected with Zombie like symptoms.

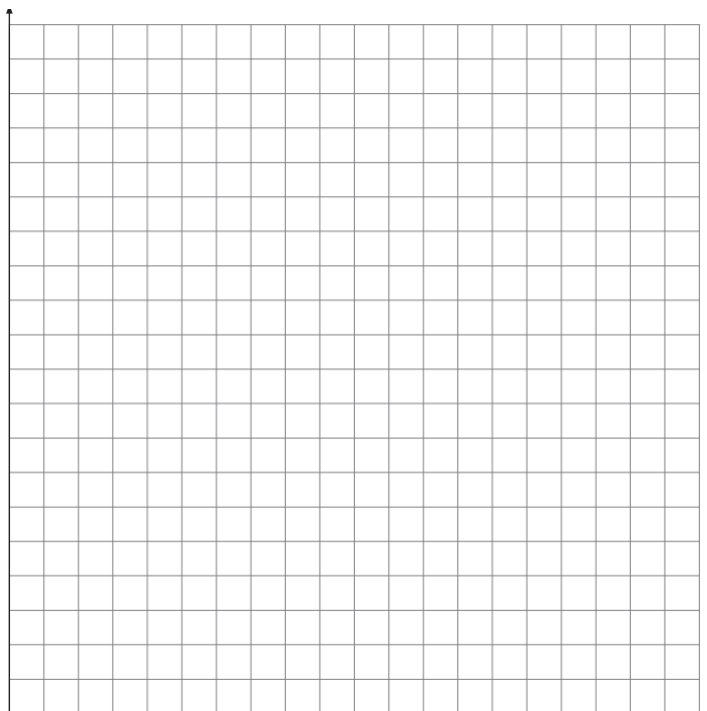
It is said that Zombies must infect exactly one other person per day in order to stay alive. It is expected that the virus will spread to neighboring towns and cities.

This Morning - BREAKING NEWS: Due to the high number of U of M Interns at Roosevelt High School, the local Bears have been quarantined in their classrooms to decrease the chance of *Solanum* spreading to the rest of Wyandotte. Students in math classes may be at a higher risk, since the virus has been extremely active amongst intern math teachers at U of M. Classes that should be extremely cautious are the B-Building math classes.

TRACKING THE DISEASE

Fill in the table depending on the number of students infected each day by *Solanum* in Mrs. Guerriero's class. Graph your data.

Days	# of People Infected
Day 0	1
Day 1	
Day 2	
Day 3	
Day 4	
Day 5	
Day 6	
Day 7	
Day 8	
Day 9	



1. If Mrs. Guerriero has 154 students, how many days until they are all infected?
2. Discuss with a group and explain why the data table starts with zero and not one.

3. Identify the domain (x) and range (y). Identify the independent and dependent variables.

4. What pattern do you see emerging on the table?

5. **There are currently 7 University of Michigan interns at Roosevelt today observing teachers for their education program. Make a table and graph that will help us to figure out how many days until all of Roosevelt High School is infected, if all 7 interns have Solanum. Provide labels on the graph below.**

Days	Number of People

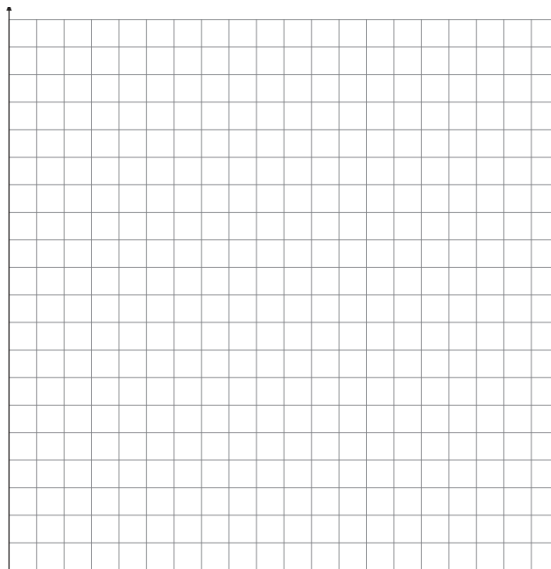
6. Zombie Attacks are not a linear function. Explain the difference in the appearance of the graph.

7. Based on your data, project how long it will be until all 1342 students in the school are infected?

8. Based on your data, project how long it will be until all of the city of Wyandotte with a population of 25,485 is infected?

9. Based on your data, project how long it will be until all of Michigan and Ohio is infected?

10. CHALLENGE: Without using the regression application on your calculator, determine a possible equation to model your data AND confirm it is correct by checking it with data on your table.





Complete each part.		<p style="font-size: small; margin-top: 5px;">Rahn © 2010</p>
$y =$		
Round (x)	# of Teams Left (y)	
0		
1		
2		
3		
4		How does this graph differ from the virus activity?
5		How does this table differ from the virus activity?
6		How does this equation differ from the virus activity?