*Solanum Virus Loose in East Lansing*

3/1/12 BREAKING NEWS: Strange behavior at Michigan State University 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.

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

*Zombies Present in Local High Schools*

3/5/12 BREAKING NEWS: Due to the high number of MSU Interns at J.W. Sexton High School, the local Big Reds have been quarantined in their classrooms to decrease the chance of Solanum spreading to the rest of Lansing. Students in math classes may be at a higher risk, since the virus has been extremely active amongst math teachers at MSU. Classes that should be extremely cautious are Ms. O’Rielly’s 1st and 6th hour classes, as well as Ms. Krueger’s 3rd and 4th hour.

**TRACKING THE DISEASE**

Fill in the table depending on the number  
of students infected each day by Solanum in   
both Ms. O’Rielly’s and Ms. Krueger’s class.

|  |  |
| --- | --- |
| Days | # of People Infected |
| Day 1 | 2 |
| Day 2 |  |
| Day 3 |  |
| Day 4 |  |
| Day 5 |  |
| Day 6 |  |
| Day 7 |  |
| Day 8 |  |
| Day 9 |  |
| Day 10 |  |

Fill in the table depending on the number   
of students infected each day by Solanum in   
Ms. O’Rielly’s class.

|  |  |
| --- | --- |
| Days | # of People Infected |
| Day 1 | 1 |
| Day 2 |  |
| Day 3 |  |
| Day 4 |  |
| Day 5 |  |
| Day 6 |  |
| Day 7 |  |
| Day 8 |  |
| Day 9 |  |
| Day 10 |  |

1. If Ms. O’Rielly and Ms. Krueger have 128 Algebra I students, how many days until they are all infected?
2. There are currently 7 MSU interns at Sexton today. Make a table and graph that will help us to figure out how many days until all of Sexton is infected, if all 7 interns have Solanum.

|  |  |
| --- | --- |
| Days | # of People Infected |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
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|  |  |

1. Do Zombie Attacks appear to be linear or exponential? Why?
2. What patterns did you see when filling in the tables and writing equations?