

Name _____

Partner Quiz

Halloween Candy Problem

Jenny got dressed up as a cheerleader on Halloween and went trick or treating in her neighborhood. She left her house with three pieces of candy in her bag that she had swiped from the big bowl her mom had prepared for trick or treaters. After trick-or-treating at the first house, she had 5 pieces of candy total. After trick-or-treating at the second house, she had 7 pieces of candy total. After the third house, she had 9 pieces total! Jenny, being very good at math, began to notice a pattern unfolding and decided to do some predicting.

1. Create a table (a t-chart would work well!) showing the house number and the amount of candy Jenny has after each house. If the same trend continues at all the houses she visits, how many pieces of candy would she have after five houses, six houses, and ten houses?
2. Assuming she doesn't eat any while out on the road, how many pieces of candy will Jenny have after going to 20 houses? 45 houses? x houses?

3. Jenny's Mom bet her that she would not get more than 100 pieces of candy. How many houses will she have to visit to make sure she proves her mom wrong?

4. Jenny wanted to somehow show visually the amount of candy she was receiving (because she's such a great math student!) She decided to draw a graph. She plotted the first points on the graph below and connected them. Help her to plot the remaining points to complete her graph. Is this graph a perfectly straight line? Why or why not?

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| T o t a l A m o u n t o f c a n d y |
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| #Houses Visited |
|-----------------|
| |

19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

6

7

1

2

3

4

5