**In/Out Patterns Name**

**Part II: Two Step Problems**

1. a. What are the next three terms in this series: 1, 5, 9…

b. Describe the pattern in words.

c. Describe the pattern in a math sentence.

d. What is the 100th term in the series?

1. a. For the formula 3x – 2 = y, what is the value of y when x equals 2?

b. When x equals 5?

c. When x equals 100?

1. Twenty-two people walk into the empty cafeteria. Two of the people are called to the office. The others break into five equal groups to work on their science projects. The project is due in three days. How many people are in each group?
2. Fill in the missing boxes and write the formula.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| in | 4 | 5 | 6 | 7 | 10 |
| out | 11 | 14 | 17 | 20 | ? |

1. Fill in the missing boxes and write the formula using x and y.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| In (x) | 6 | 8 | 10 | 12 | 14 | 20 |
| out (y) | 2 | 3 | 4 | 5 | ? | ? |