Mathematics9 Date _____

Unit 7 Linear Relations

7.1 Representing Patterns

Ex.

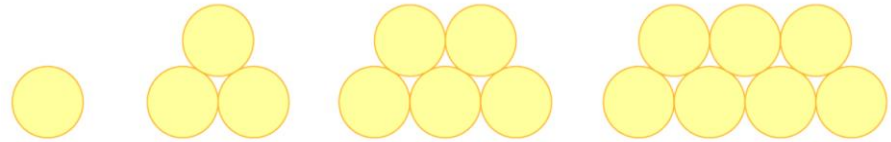

Figure 1 Figure 2 Figure 3 Figure 4

a) Describe the pattern.

b) Create a table of values to represent the relation between the figure number (n) and the number of circles (c). Is this a linear relation?

c) Write a linear equation to represent the pattern.

d) How many circles are there in figure #15?

e) Which figure number has 61 circles?

Ex. In a banquet hall a single rectangular table seats six people (two on each side and one at each end). Each time a new table is added on to the end, four more people can be seated.

a) Create a table of values showing the relation between the number of tables (t) and the number of people (p) for 1 to 4 tables.

b) Write a linear relation to model the situation.

c) How many people can 13 connected tables seat?

d) How many tables are connected to allow seating for 114 people?

Practice: Text pg. 162 #3-6, 8, 9ab, 11, 14.