COMP 6-8 – Fall 2015 Session 1

Crossing the River

Two adults and two children need to cross a river that is too large and too dangerous to swim across. They have one small boat available to help them. After testing the boat they find that it can hold either one adult, or one or two children. Everyone in the group is able to row the boat. In the space below **show** how you get them all across the river.

Crossing the River

How many one-way trips does it take for the two adults and two children to cross the river?

How many one-way trips would it take for three adults and two children to cross the river? Explain.

How many one-way trips would it take for eight adults and two children to cross the river? Explain.

With your partner, develop (represent it in your own way below) a system for knowing how many one-way trips it would take if there were "n" number of adults and two children.

Crossing the River

Now that you have a representation for “n” number of adults and two children, consider a representation for the “n” number of adults and “c” number of children. Write down your representation and an explanation for why your representation makes sense.

Hexagon Tables

A big party is being planned and everyone will sit at hexagon-shaped tables. The tables will be put together in one long line as shown below. If there are 57 tables and each side of the table fits only one person, how many guests can be seated? Write an expression to represent the number of guests that can be seated at 57 tables.