## MONT106Q – Mathematical Thinking Thinking About Kinship (and Names) October 5, 2016

## Background

Let's take a few minutes and think about how we define kinship (i.e. the relationships we have to members of our *extended* families), and how information related to that is reflected in the names we use to indentify ourselves. If you need to look up the answers to some of these questions, go ahead and use your phones and Google.

## Questions

- (1) Exactly what makes someone your *first cousin*? (That is, say in words precisely what that means I'm not asking the names of your first cousins, if any!) Can first cousins have different family names (surnames)? How?
- (2) What makes someone your *second cousin*? Look it up if necessary. Can second cousins have the same family name (surname)? How?
- (3) Do you know what it means for someone to be your *first cousin, once removed*? Look it up if necessary.
- (4) What makes someone your *great grandparent*? How many of them do you have? Could other people have more or fewer of them? (Interesting sidelight: How many of their names do you know? Do you know when and where they lived?)
- (5) What makes someone your brother-in-law?
- (6) Suppose a person's father dies, his or her mother remarries and has additional children with her new husband. What relation are the children of that second marriage to the person?
- (7) From Ascher, Chapter 3: Two mothers and two daughters sleep in one room. There are only three beds and no one shares a bed with anyone else. How is that possible?
- (8) From Ascher, Chapter 3: A grown man is walking with a boy. A passerby asks the boy, "how is the man related to you?" The boy says, "His mother is my mother's mother-in-law." What is a simpler explanation for how the man is related to the boy?
- (9) People from English-speaking countries (and most other Northern European countries) did not always use surnames. But once people started using them (and called themselves something like Richard Draper, not Richard son of John, or Richard of Basingstoke), they quickly settled

on a way to pass on a surname to their children. How did that work, at least traditionally? Is that different from the way family names work in Spanish-speaking countries? (Look this up if you don't know. For example, what does the name of the famous Colombian author Gabriel García Márquez tell us about his family?) How did you get *your* family name?

- (10) Chinese people use a personal name and a surname, but which order do they come *in Chinese*? (Look it up if you need to.) There are European countries where people list their names the same way. What is one?
- (11) Russian people use a system of *patronymics* to get their middle names, and their family names are *inflected* to reflect their gender. Exactly how does that work? For instance, if someone is named Ivan Dmitrievich Petrov, what do we know about his family from the "middle" name (the patronymic) Dmitrievich? What if Ivan had a son also named Ivan, what would the son's "middle" name be? If he had a daughter named Lyudmila, what would her name be? The tennis player Maria Sharapova's full name is Maria Yuryevna Sharapova. How much of her family can we reconstruct from that?