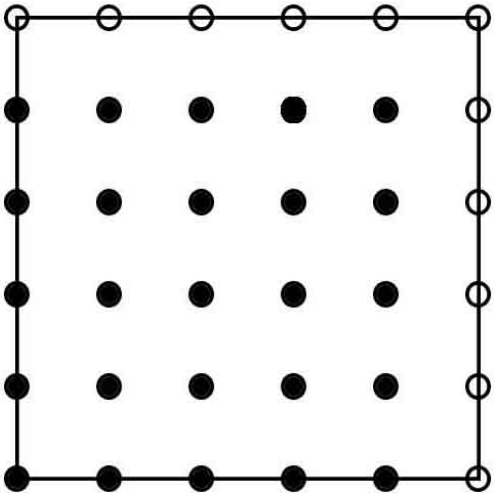
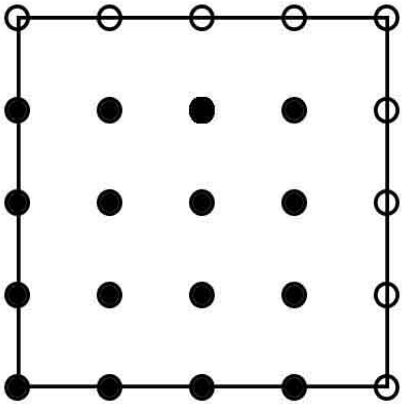
Handout: Rule the Trees

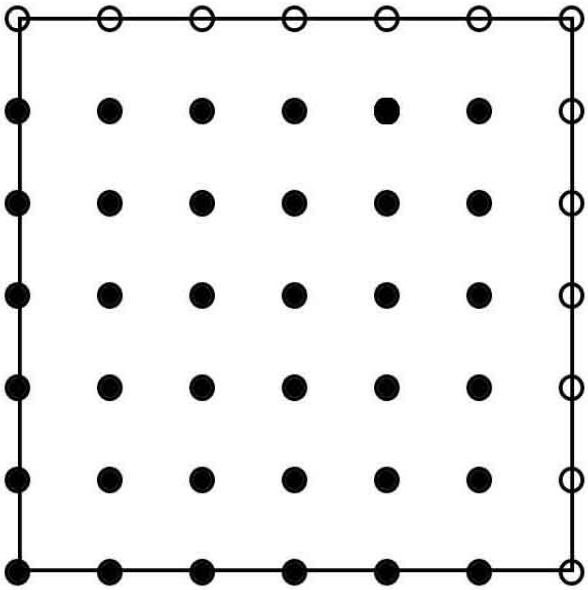
1. What happens if we apply RULE $(2, 3)$ *five* times on Plot 5?



2. What happens if we apply RULE $(2, 3)$ *four* times on Plot 4?



3. What happens if we apply RULE $(2, 3)$ *six* times on Plot 6?



4. Given any two whole numbers, r and u, what happens when we apply RULE (r, u) n times on Plot n?

   Hint: what does this mean on the bigger forest (rather than simply our looping back version where we keep looping around when we get to the edge of the Plot).

5. Let $r = 1$, then our slope $m = u$. Consider the case where m is a whole number. In this case each time we apply RULE $(1, m)$, that is we go across one column and up m rows. Check that applying RULE $(1, m)$ three times is the same as going across three columns and up the remainder of $3m$ after dividing by n (on our Plot n lot).