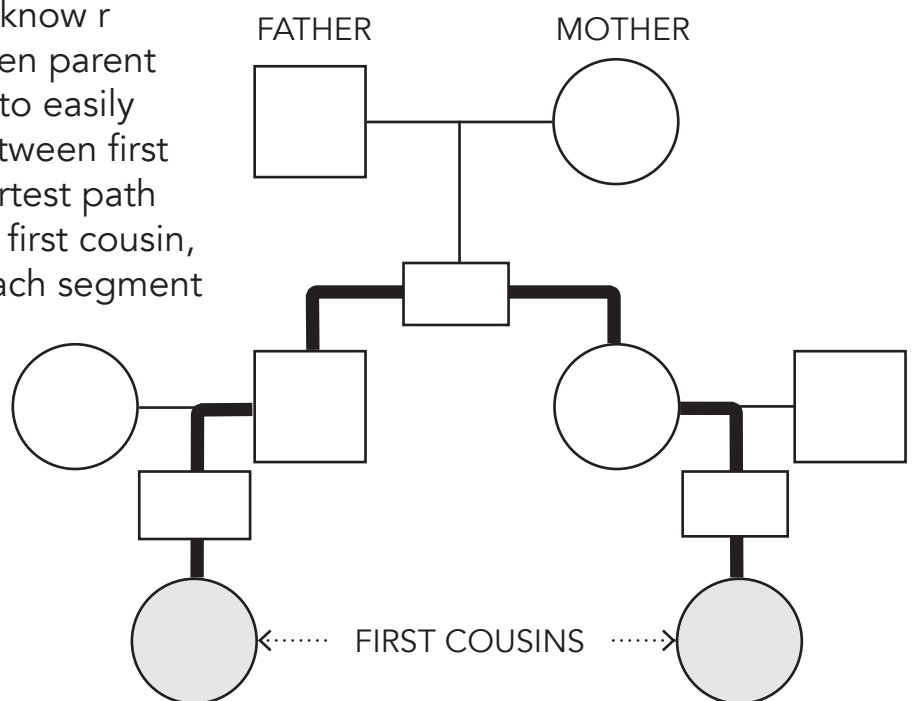


First cousins

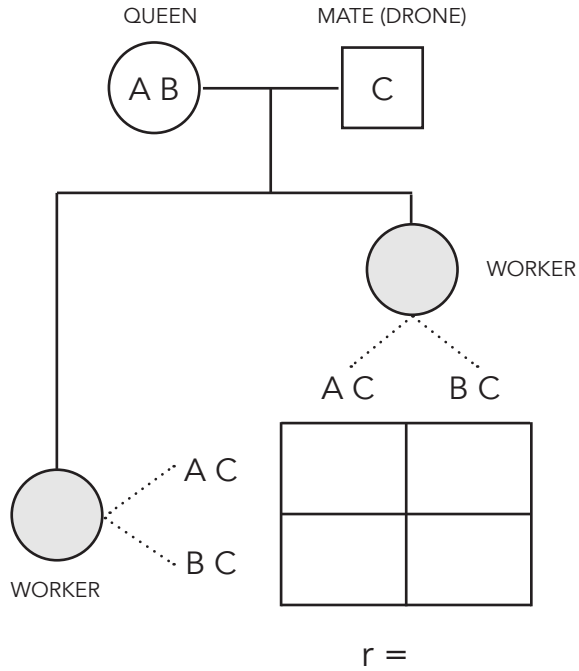
We can use the fact that we know r between siblings and between parent and offspring; this allows us to easily compute the relatedness between first cousins. Simply take the shortest path (bold) from a person to their first cousin, multiplying relatedness of each segment as you go.

In this case there are 2 parent-offspring segments and 1 sibling segment.

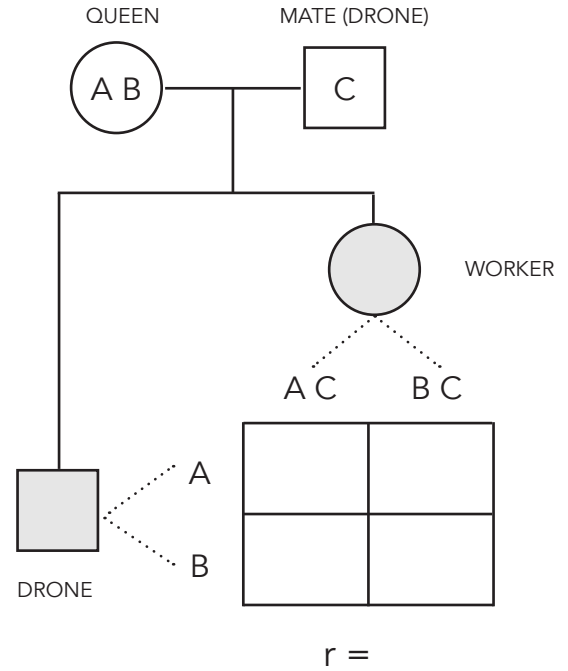
$r =$



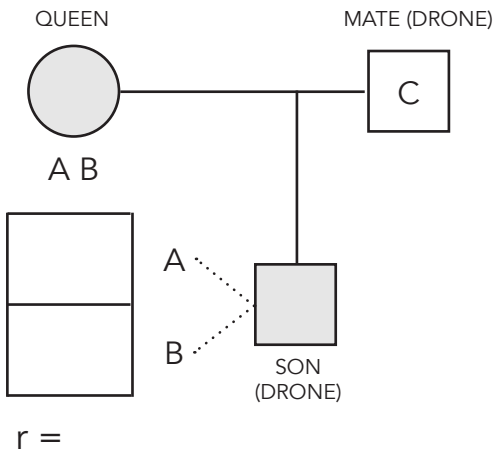
Worker vs. Worker



Drone vs. Worker



Queen vs. Son



Queen vs. Daughter

