BABY BLOOD TYPE ACTIVITY

Mom is going to have a baby but there is some concern that the baby might have a genetic defect and 3 men claim to be the father. Your job is to determine if the baby will be healthy and figure out who the father is. Use your knowledge of karyotypes, DNA fingerprints and blood type genetics.

1. What sex will the baby be?
   Describe what is wrong with the baby’s karyotype.

2. Who is the father according to the DNA fingerprints?
   How do you know?
   List 3 cell types that could be used to obtain mom’s DNA.

3. Perform a cross between mom and the real father according to the DNA fingerprints to show that they can produce the baby. Circle the baby in the Punnett square.

4. In case the baby needs a blood transfusion, who could donate blood without causing medical complications?

   If DNA fingerprints were not available and SAM claimed to be the father, use a cross and Punnett square to determine if he could possibly be the father.