

You are given four homozygous strains of corn (A, B, C, D) and make the crosses shown below. A and B are colorless (recessive), while C and D are purple (dominant).

P <sub>0</sub>	A x C	A x D	B x C	B x D
F <sub>1</sub>	all purple	all purple	all purple	all purple
F <sub>2</sub>	3 purple 1 colorless	3 purple 1 colorless	3 purple 1 spotted	3 purple 1 colorless

Using the data given above, genetically characterize all four strains.