

Blood Type Problems

1. List all the possible genotypes for each of the 4 blood types:

Type O OO Type A AA or AO

Type B BB Type AB AB

SHOW WORK!

2. A man with AB blood is married to a woman with AB blood. What percentage of their children would be Type B blood?

	A	B	
A	AA	AB	25%
B	AB	BB	

3. A man who has type B blood (genotype: BB) is married to a woman with type O blood. What blood type will their children have?

	B	B	
O			100% BO
O			

4. A woman with type A blood (genotype: AO) is married to a type B person (genotype: BO). What blood types could their children have?

	A	O	
B	AB	BO	25% AB 25% B 25% A 25% O
O	AO	OO	

5. A woman with type A blood is claiming that a man with type AB blood is the father of her child, who is also type AB. Could this man be the father? If he could be, explain one way this would work.

yes its possible. The man could have given the B while she gave the A. Result: child w/ AB.

6. A man with type AB blood is married to a woman with type O blood. They have two natural children, and one adopted child. The children's blood types are: A, B, and O. Which child was adopted? How do you know?

~~AB~~



O has to be adopted,
Dad would give an
A or a B so type
O would not be an
option for ~~her~~ ^{his} children.

7. A woman who is Rh- had her first child. The Child is Rh+. This pregnancy went fine. She was very worried before her child was born because she heard that there could possibly be complications based on her blood being Rh- and her Child's being Rh+. Two years have gone by and she is now about to have her second child. She is no longer worried at all because since she did not have any issues the first time she won't have any issues in the future either. Is she correct in her assumption? Explain your answer.

NO, ~~During~~ ^{During} her first pregnancy there is a good chance her babies blood mixed with hers. Not a big deal at the time but she now would produce Anti bodies against Rh+ blood. Anti bodies can cross the Placental barrier for all subsequent pregnancies.