

# What is Incomplete Dominance and Codominance?

## Worksheet

Incomplete dominance produces a blended intermediate phenotype (e.g., red white pink), while codominance shows both alleles fully and separately in the phenotype (e.g., AB blood type).

## Questions

1. A red (RR) and white (rr) snapdragon are crossed, producing pink (Rr) offspring. This is an example of:  
A) Complete dominance  
B) Incomplete dominance  
C) Codominance  
D) Polygenic inheritance
2. AB blood type, where both A and B antigens are expressed, is an example of:  
A) Incomplete dominance  
B) Codominance  
C) Recessive epistasis  
D) Polygenic inheritance
3. In incomplete dominance, what is the expected phenotype ratio of an Rr Rr cross?  
A) 3:1  
B) 1:2:1  
C) 9:3:3:1  
D) 1:1
4. What distinguishes codominance from incomplete dominance?  
A) Codominance blends traits; incomplete dominance shows both fully  
B) Codominance shows both alleles fully; incomplete dominance blends them  
C) They are identical concepts  
D) Codominance only occurs in plants
5. A red-flowered snapdragon (RR) is crossed with a white-flowered one (rr). The trait shows incomplete dominance. What color are the F1 offspring?
6. Two pink snapdragons (Rr Rr) are crossed. What phenotype ratio is expected in the offspring?
7. A person with genotype IAIB has parents with blood types A (IAIA) and B (IBIB). What is the person's blood type, and why?
8. Define: What is incomplete dominance?
9. Define: What is codominance?
10. Define: Give an example of incomplete dominance.

## Answer Key

1. B) Incomplete dominance - Pink is a blended intermediate phenotype, the hallmark of incomplete dominance.
2. B) Codominance - Both IA and IB alleles are fully and separately expressed - codominance.
3. B) 1:2:1 - Phenotype tracks genotype directly: 1 red : 2 pink : 1 white.
4. B) Codominance shows both alleles fully; incomplete dominance blends them - Codominance = both traits visible separately; incomplete dominance = blended intermediate.
5. Incomplete dominance blends the two phenotypes RR rr all Rr offspring Rr phenotype = pink (intermediate between red and white)
6. Genotypes: 1 RR : 2 Rr : 1 rr With incomplete dominance, phenotype follows genotype directly Phenotype ratio = 1 red : 2 pink : 1 white
7. IA and IB are codominant - neither masks the other Both A and B antigens are expressed on red blood cells Blood type = AB
8. A heterozygote shows a blended, intermediate phenotype between the two homozygous phenotypes.
9. A heterozygote shows both alleles' phenotypes fully and separately, without blending.
10. Red (RR) white (rr) snapdragons produce pink (Rr) offspring.

### **Bounlu**

All cards, step-by-step solutions and an AI tutor are in the Notek app.  
Promy turns exam dates into automatic reminders.