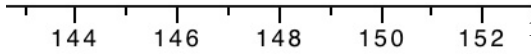
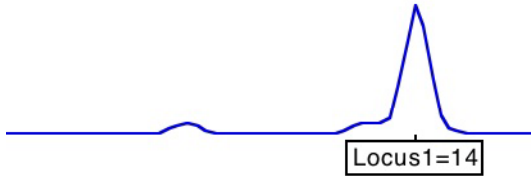


# CONSTRUCT AN UNKNOWN PROFILE- EXAMPLE- LOCUS 1

This demonstrates inheritance of a single autosomal locus, heterozygotes have 2 different alleles and homozygotes have 2 identical alleles. Try to predict the allelic values for the Unknown individual assuming a relationship of potential father.

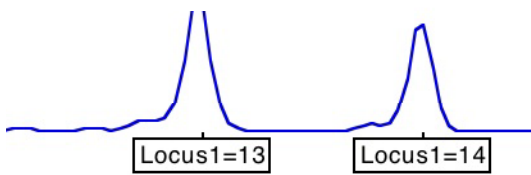


MOTHER



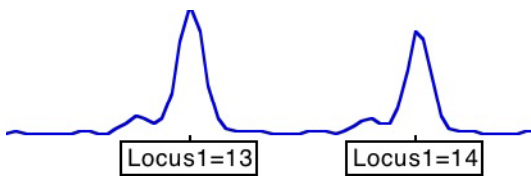
Locus 1, Allele 1, Mother	Locus 1, Allele 2, Mother
14	14

CHILD 1



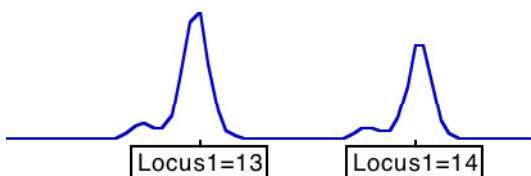
Locus 1, Allele 1, Child 1	Locus 1, Allele 2, Child 1
13	14

CHILD 2



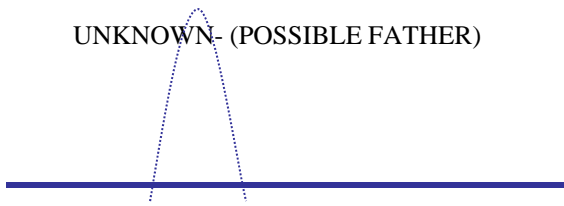
Locus 1, Allele 1, Child 2	Locus 1, Allele 2, Child 2
13	14

CHILD 3



Locus 1, Allele 1, Child 3	Locus 1, Allele 2, Child 3
13	14

UNKNOWN- (POSSIBLE FATHER)

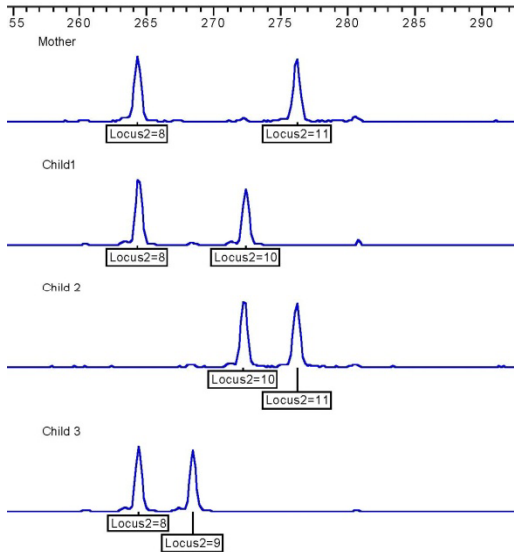


Locus 1, Allele 1, Unknown	Locus 1, Allele 2, Unknown
13	?

It may be helpful to draw where the peaks might appear in the space provided for the unknown, demonstrated with dotted line



# CONSTRUCT AN UNKNOWN PROFILE- EXERCISE, LOCI 2-3



Locus 2, Allele 1-Mother	Locus 2, Allele 2-Mother

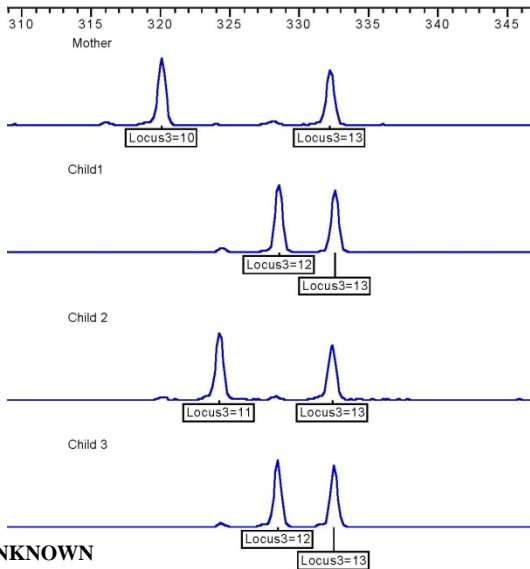
Locus 2, Allele 1-Child 1	Locus 2, Allele 2, Child 1

Locus 2, Allele 1, Child 2	Locus 2, Allele 2, Child 2

Locus 2, Allele 1, Child 3	Locus 2, Allele 2, Child 3

Locus 2, Allele 1, Unknown	Locus 2, Allele 2, Unknown

UNKNOWN



Locus 3, Allele1-Mother	Locus 3, Allele2-Mother

Locus 3, Allele 1-Child 1	Locus 3, Allele 2, Child 1

Locus 3, Allele 1, Child 2	Locus 3, Allele 2, Child 2

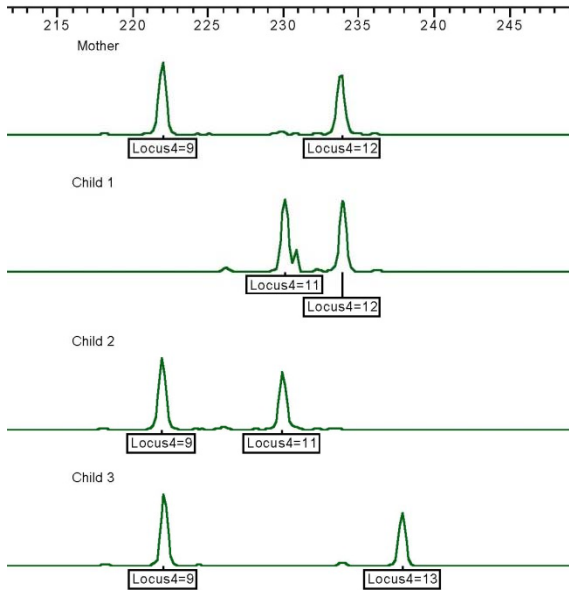
Locus 3, Allele 1, Child 3	Locus 3, Allele 2, Child 3

Locus 3, Allele 1, Unknown	Locus 3, Allele 2, Unknown

UNKNOWN



# CONSTRUCT AN UNKNOWN PROFILE- EXERCISE, LOCI 4-5



Locus 4, Allele 1-Mother	Locus4, Allele 2-Mother

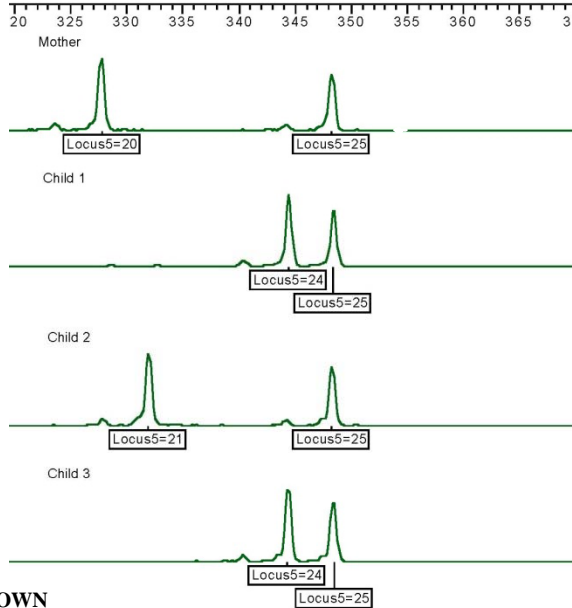
Locus 4, Allele 1-Child 1	Locus 4, Allele 2, Child 1

Locus 4, Allele 1, Child 2	Locus 4, Allele 2, Child 2

Locus 4, Allele 1, Child 3	Locus 4, Allele 2, Child 3

Locus 4, Allele 1, Unknown	Locus 4, Allele 2, Unknown

UNKNOWN



Locus 5, Allele1-Mother	Locus5, Allele2-Mother

Locus 5, Allele 1-Child 1	Locus 5, Allele 2, Child 1

Locus 5, Allele 1, Child 2	Locus 5, Allele 2, Child 2

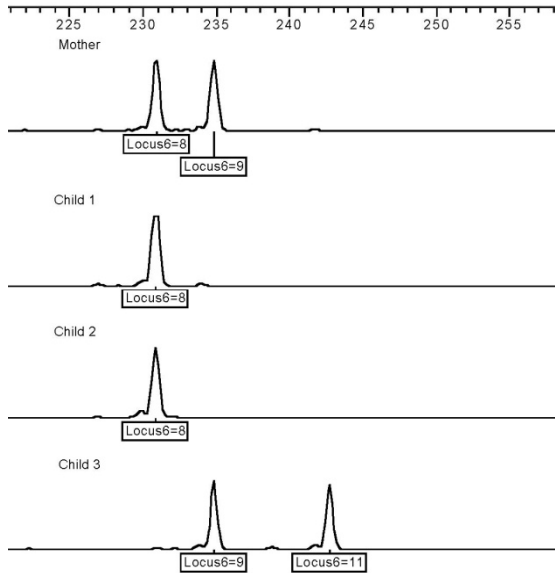
Locus 5, Allele 1, Child 3	Locus 5, Allele 2, Child 3

Locus 5, Allele 1, Unknown	Locus 5, Allele 2, Unknown

UNKNOWN



# CONSTRUCT AN UNKNOWN PROFILE- EXERCISE, LOCI 6-7



Locus 6, Allele 1, Mother	Locus 6, Allele 2, Mother

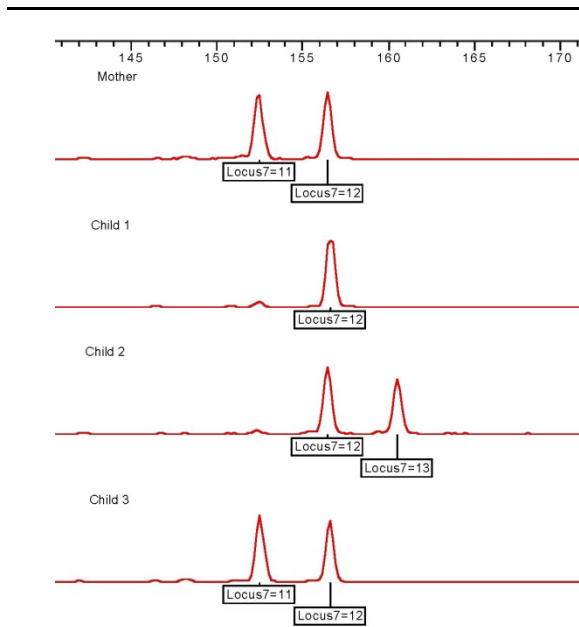
Locus 6, Allele 1, Child 1	Locus 6, Allele 2, Child 1

Locus 6, Allele 1, Child 2	Locus 6, Allele 2, Child 2

Locus 6, Allele 1, Child 3	Locus 6, Allele 2, Child 3

UNKNOWN

Locus 6, Allele 1, Unknown	Locus 6, Allele 2, Unknown



Locus 7, Allele1, Mother	Locus 7, Allele2, Mother

Locus 7, Allele 1, Child 1	Locus 7, Allele 2, Child 1

Locus 7, Allele 1, Child 2	Locus 7, Allele 2, Child 2

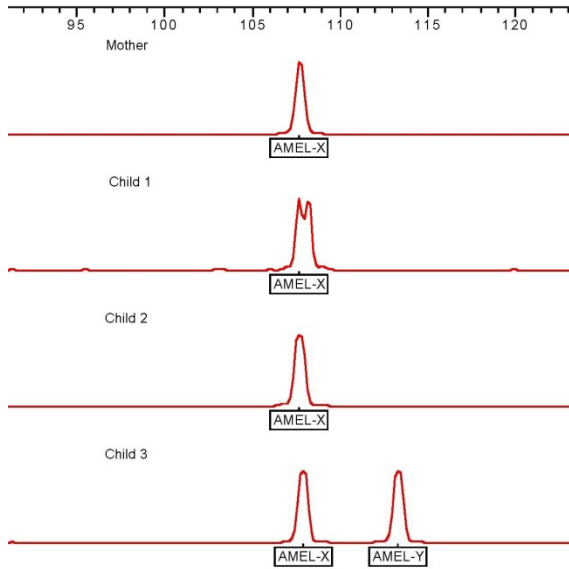
Locus 7, Allele 1, Child 3	Locus 7, Allele 2, Child 3

UNKNOWN

Locus 7, Allele 1, Unknown	Locus 7, Allele 2, Unknown



# CONSTRUCT AN UNKNOWN PROFILE- EXERCISE- XY MARKER, AND SUMMARY SCORE TABLE



UNKNOWN

AMEL, Allele 1, Mother	AMEL, Allele 2, Mother

AMEL, Allele 1, Child 1	AMEL, Allele 2, Child 1

AMEL, Allele 1, Child 2	AMEL, Allele 2, Child 2

AMEL, Allele 1, Child 3	AMEL, Allele 2, Child 3

AMEL, Allele 1, Unknown	AMEL, Allele 2, Unknown

Summary Score Table-Unknown Profile		
Locus	Allele 1	Allele 2
Locus 1		
Locus 2		
Locus 3		
Locus 4		
Locus 5		
Locus 6		
Locus 7		
AMEL		

Refer to the example and exercises to completely fill in the summary score table to the left. Use the values from the prediction at each individual locus.

