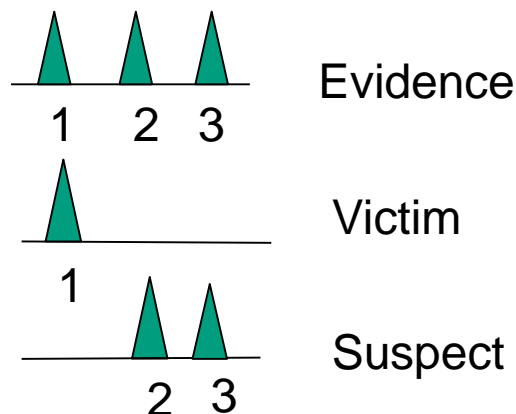


# Day 1: Exercises

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# EXERCISE TE1



- a) Allele frequencies  $p_1=0.2$ ,  $p_2=0.1$ ,  $p_3=0.05$
- b) Allele frequencies  $p_1=0.05$ ,  $p_2=0.1$ ,  $p_3=0.2$
- Calculate LR by hand and using LRmixTK() for  $H_p$ : Victim + suspect vs.  $H_d$ : Victim + Unknown

# SOLUTION EXERCISE TE1

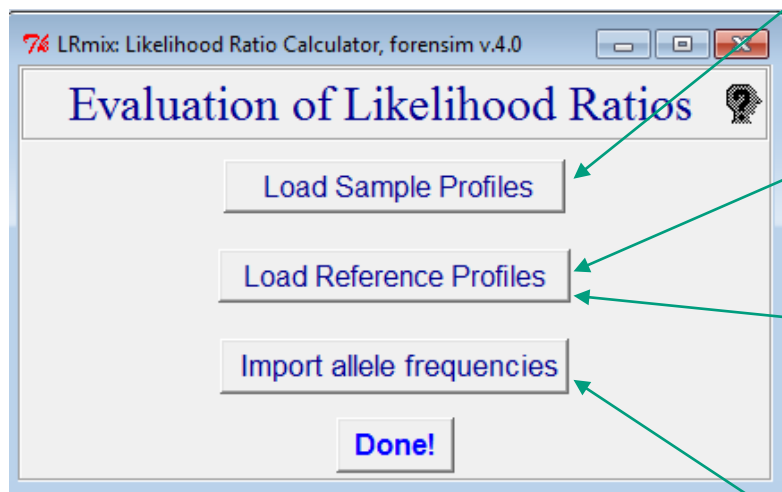
a) Allele frequencies  $p_1=0.2$ ,  $p_2=0.1$ ,  $p_3=0.05$

$$LR = \frac{1}{2p_2p_3} = \frac{1}{2 \times 0.1 \times 0.05} = 100$$

b) Allele frequencies  $p_1=0.05$ ,  $p_2=0.1$ ,  $p_3=0.2$

$$LR = \frac{1}{2p_2p_3} = \frac{1}{2 \times 0.1 \times 0.2} = 25$$

# LRmixTK()



evidence\_exerciseT1.csv : (click Display...)

	A	B	C	D	E
SampleName	Marker	Allele1	Allele2	Allele3	
p16	M1	1	2	3	

suspect\_exerciseT1.csv :

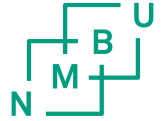
SampleName	Marker	Allele1	Allele2
suspect	M1	1	2

victim\_exerciseT1.csv :

SampleName	Marker	Allele1	Allele2
victim	M1	1	2

allele\_frequencies\_exerciseT1a.csv :

Allele	M1
1	0.2
2	0.1
3	0.05
4	0.65



# Exercises Day 1

- Exercises 1 and 9 Familias 3. Documents and Familias files available from
  - <http://arken.umb.no/~theg/Copenhagen2014>