

Scenario (3)

auto-Ree

Anna
(normal)

auto-Dom

Jackson
(deaf)

auto-Dom

aff. norm
B/- b/b

Auto-Ree

aff. norm
a/a A/-

○

▣

A/- b/b x

A/- B/b

★ (3.1) $A/A \ b/b \times A/A \ B/b$

	(AB)	(Ab)
(AB)	$[AAB/b]$ deaf	AAb/b

$P(\text{Deaf}) = 1/2$

★ most likely genotype
 $A/- b/b \times A/A B/b$

Jackson
married into
Anna's family
∴ most likely
homo normal
(not carrier)

(3.2) $A/A \ b/b \times A/a \ B/b$

	(AB)	(Ab)	(aB)	(ab)
(AB)	$[AAB/b]$ deaf	AAb/b	$[AaB/b]$ deaf	Aab/b

$P(\text{Deaf}) = 3/4$

★ (3.3) $A/a \ b/b \times A/A \ B/b$

	(AB)	(Ab)
(Ab)	$[AAB/b]$ deaf	AAb/b
(ab)	$[AaB/b]$ deaf	Aab/b

$P(\text{Deaf}) = 2/4$

(3.4) $A/a \ b/b \times A/a \ B/b$

	(AB)	(Ab)	(aB)	(ab)
(Ab)	$[AAB/b]$ deaf	AAb/b	$[AaB/b]$ deaf	Aab/b
(ab)	$[AaB/b]$ deaf	Aab/b	$[aaB/b]$ deaf	$[aab/b]$ deaf

$P(\text{Deaf}) = 5/8$