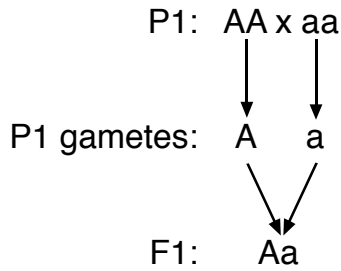
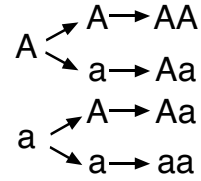


MONOHYBRID CROSS



	A	a
A	AA	Aa
a	Aa	aa

$$(A+a)(A+a)=A^2+2Aa+a^2$$

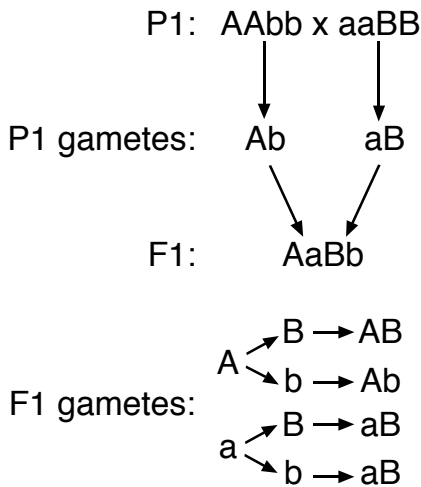


F1 gametes: A
a

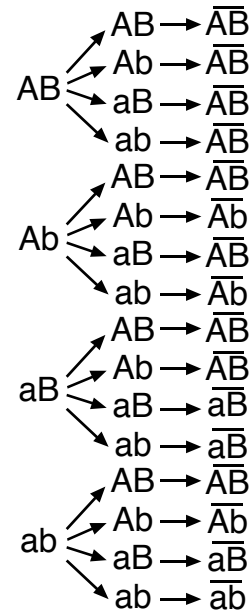
genotypic ratio = 1AA : 2Aa : 1aa

phenotypic ratio = 3 \bar{A} : 1 \bar{a}

DIHYBRID CROSS



	AB	Ab	aB	ab
AB	$\overline{A}\overline{B}$	$\overline{A}\overline{b}$	$\overline{A}\overline{B}$	$\overline{A}\overline{b}$
Ab	$\overline{A}\overline{b}$	$\overline{A}b$	$\overline{A}\overline{B}$	$\overline{A}b$
aB	$\overline{A}\overline{b}$	$\overline{A}b$	$\overline{a}\overline{B}$	$\overline{a}b$
ab	$\overline{A}\overline{b}$	$\overline{A}b$	$\overline{a}\overline{B}$	$\overline{a}b$



$$(AB+Ab+aB+ab)(AB+Ab+aB+ab)=$$

$$(\overline{A}\overline{B}+\overline{A}\overline{b}+\overline{A}\overline{B}+\overline{A}\overline{b})+(\overline{A}\overline{b}+\overline{A}b+\overline{A}\overline{B}+\overline{A}b)+(\overline{A}\overline{B}+\overline{A}\overline{b}+\overline{a}\overline{B}+\overline{a}b)+(\overline{A}\overline{b}+\overline{A}b+\overline{a}\overline{B}+\overline{a}b)$$

phenotypic ratio = 9 $\overline{A}\overline{B}$:3 $\overline{A}b$:3 $\overline{a}\overline{B}$:3 $\overline{a}b$

phenotypic ratio for A = 3 \overline{A} :1 \overline{a}

genotypic ratio for A = 1AA:2Aa:1aa

phenotypic ratio for B = 3 \overline{B} :1 \overline{b}

genotypic ratio for B = 1BB:2Bb:1bb