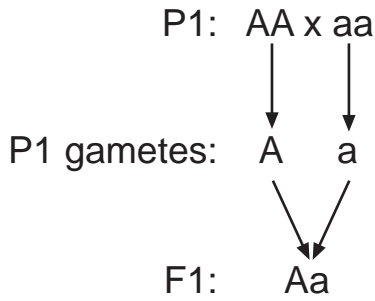
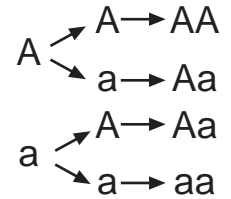


MONOHYBRID CROSS



	A	a
A	AA	Aa
a	Aa	aa

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

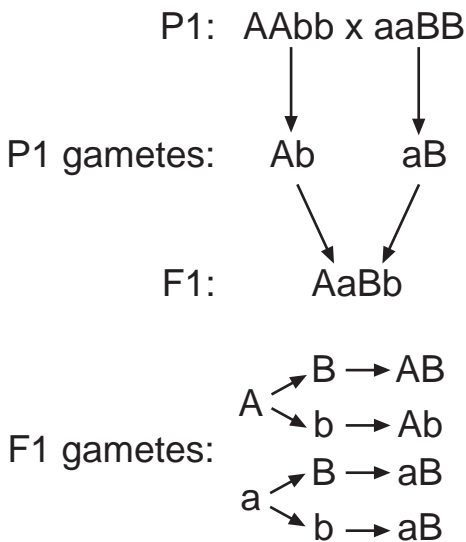


F1 gametes: A a

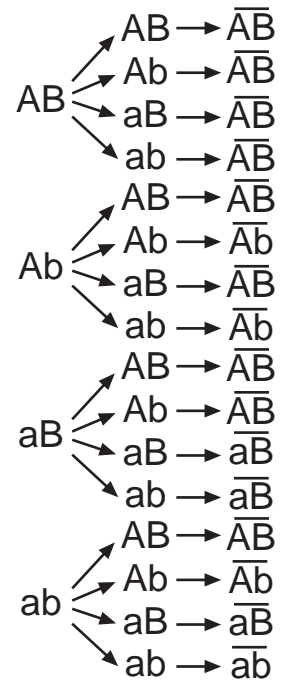
genotypic ratio = 1AA : 2Aa : 1aa

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

DIHYBRID CROSS



	AB	Ab	aB	ab
AB	$\bar{A}\bar{B}$	$\bar{A}b$	$\bar{A}B$	$\bar{A}b$
Ab	$\bar{A}\bar{B}$	$\bar{A}b$	$\bar{A}B$	$\bar{A}b$
aB	$\bar{A}\bar{B}$	$\bar{A}b$	$\bar{A}B$	$\bar{A}b$
ab	$\bar{A}\bar{B}$	$\bar{A}b$	$\bar{A}B$	$\bar{A}b$



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

$$(\bar{A}\bar{B}+\bar{A}b+\bar{A}B+\bar{A}b)+(\bar{A}\bar{B}+\bar{A}b+\bar{A}B+\bar{A}b)+(\bar{A}\bar{B}+\bar{A}b+\bar{A}B+\bar{A}b)+(\bar{A}\bar{B}+\bar{A}b+\bar{A}B+\bar{A}b)$$

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

phenotypic ratio for A = 3 \bar{A} :1 \bar{a}
genotypic ratio for A = 1AA:2Aa:1aa

phenotypic ratio for B = 3 \bar{B} :1 \bar{b}
genotypic ratio for B = 1BB:2Bb:1bb