

Name: _____ Date: _____

Biology Review: Dihybrid Crosses

Determine how many combinations of genotypes and phenotypes are present in each of the crosses below.

Allele	Trait	Type
G	Solid gray fur	Dominant
g	Striped gray fur	Recessive
B	Green eyes	Dominant
b	Blue Eyes	Recessive
T	Long tail	Dominant
t	Short tail	Recessive
E	Large ears	Dominant
e	Small ears	Recessive

	G g	B b	2	2	4												
Ex:	<table border="1" style="display: inline-table; text-align: left;"> <tr><td>G</td><td>GG</td><td>Gg</td></tr> <tr><td>g</td><td>Gg</td><td>gg</td></tr> </table>	G	GG	Gg	g	Gg	gg	<table border="1" style="display: inline-table; text-align: left;"> <tr><td>B</td><td>BB</td><td>Bb</td></tr> <tr><td>b</td><td>Bb</td><td>bb</td></tr> </table>	B	BB	Bb	b	Bb	bb	3	3	9
G	GG	Gg															
g	Gg	gg															
B	BB	Bb															
b	Bb	bb															
	GgBb × GgBb																

For each of the crosses below, determine how many combinations of genotypes are possible.

#1

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	bbEe × Bbee		# of phenotypes × # of phenotypes = total combos									
			_____ × _____ = _____									
			# of genotypes × # of genotypes = total combos									

#2

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	GGTt × ggTT		# of phenotypes × # of phenotypes = total combos									
			_____ × _____ = _____									
			# of genotypes × # of genotypes = total combos									

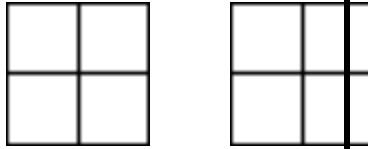
#3

	<table border="1" style="display: inline-table; text-align: left;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>					<table border="1" style="display: inline-table; text-align: left;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>					_____ × _____ = _____	
	bbEe × BbEe		# of phenotypes × # of phenotypes = total combos									
			_____ × _____ = _____									
			# of genotypes × # of genotypes = total combos									

#4

	<table border="1" style="display: inline-table; text-align: left;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>					<table border="1" style="display: inline-table; text-align: left;"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>					_____ × _____ = _____	
	TtBb × TtBb		# of phenotypes × # of phenotypes = total combos									
			_____ × _____ = _____									
			# of genotypes × # of genotypes = total combos									

#5



ggBb × GgBB

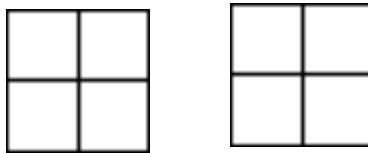
$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of phenotypes # of phenotypes total combos

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of genotypes # of genotypes total combos

#6



TtEe × ttEe

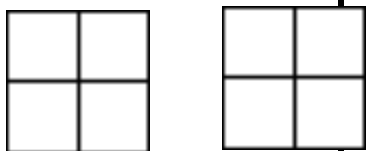
$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of phenotypes # of phenotypes total combos

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of genotypes # of genotypes total combos

#7



GGBb × Ggbb

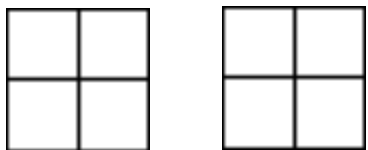
$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of phenotypes # of phenotypes total combos

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of genotypes # of genotypes total combos

#8



BbEE × Bbee

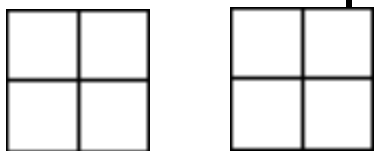
$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of phenotypes # of phenotypes total combos

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of genotypes # of genotypes total combos

#9



TtEe × TtEe

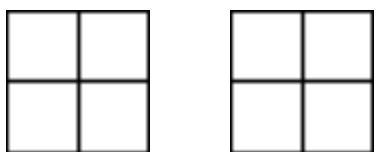
$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of phenotypes # of phenotypes total combos

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of genotypes # of genotypes total combos

#10



GgTt × GgTt

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of phenotypes # of phenotypes total combos

$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

of genotypes # of genotypes total combos