

1/11 CH. 15 ADDITIONAL PROBS - done during lect., part of 1, 5, 12, 13, 15, 17 pp 303-304 (9th ed.)

1. $X^H Y \times$

$F_1 \text{ } \frac{1}{2} X^H X^h \times X^H Y$ - ALL DAUGHTERS NORMAL BECAUSE OF
 - 50% OF SONS HEMOPHILIC
 - $(.5 \times .5 \times .5 \times .5) = 1/16$

	X^H	Y
X^H	$X^H X^H$	$X^H Y$
X^h	$X^H X^h$	$X^h Y$

5. $Tc Aa Ss \times Tc Aa Ss$

Tail ANT - 4/8
 DUMM - ANT - 7
 DUMM No - 42
 Tail No - 5

$Tc Aa \times Tc Aa$

ANT up 1/2
 ANT DN 2
 No DN 48
 No UP 3

$Aa Ss \times Aa Ss$

$\frac{12}{100} = 12\% \text{ tca}$

$\frac{5}{100} = 5\% \text{ sca}$

12. 50% WILL BE RECOMBINANTS. IF DON'T KNOW WERE ON SAME CHROMOSOME. CROSS SHOWS RECOMB RATES LIKE GENES A & B WERE ON DIFF. CHROMOSOMES.

13. B & R 10 MAP UNITS APART

$F_1 = BB RR \times bb rr$

$F_2 = Bb Rr \times Bb Rr$

1000 PROGENY

10% RECOMB

900 PARENTAL \therefore 450 $Bb Rr$; 450 $bb rr$

100 RECOMB \therefore 50 $Bb rr$; 50 $bb Rr$

BLUE
OVAL

WT ROUND
WT. ROUND

15. BANANAS ARE TRIPLOID SO HOMOLOGOUS CHRS CAN'T PAIR DURING MEIOSIS. THIS MEANS THEY CAN'T MAKE HAPLOID GAMETES THAT CAN FUSE TO MAKE ORG W. TRIPLOID CHRS.

17. ZYGOTE WAS σ^7 TO START WITH (XX). WHEN 1ST CELL DIVISION OCCURRED, ORG SPLIT INTO 2 DISTINCT ORGS. ONE ORG KEPT 3 CHRS, OTHER GOT ONLY 1 (AFTER REPLICATION, NOW DISTINCT - ONE KEPT ONE PAIR OF X'S TOGETHER)
↳ STAYED MALE ↳ BECAME FEMALE.