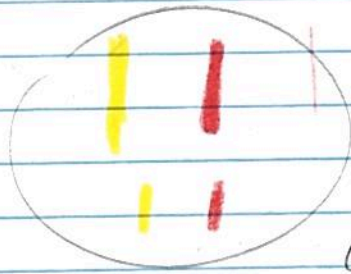


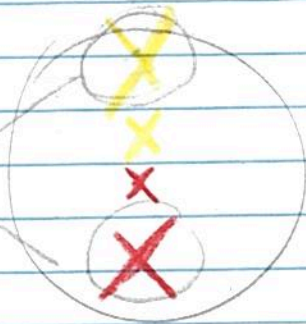
30 A

MITOSIS



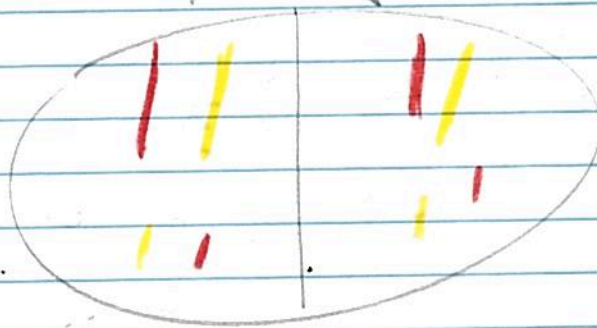
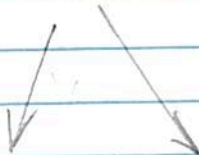
diploid
 $2N=4$

duplicate
line up in middle



metaphase

homologous
pair

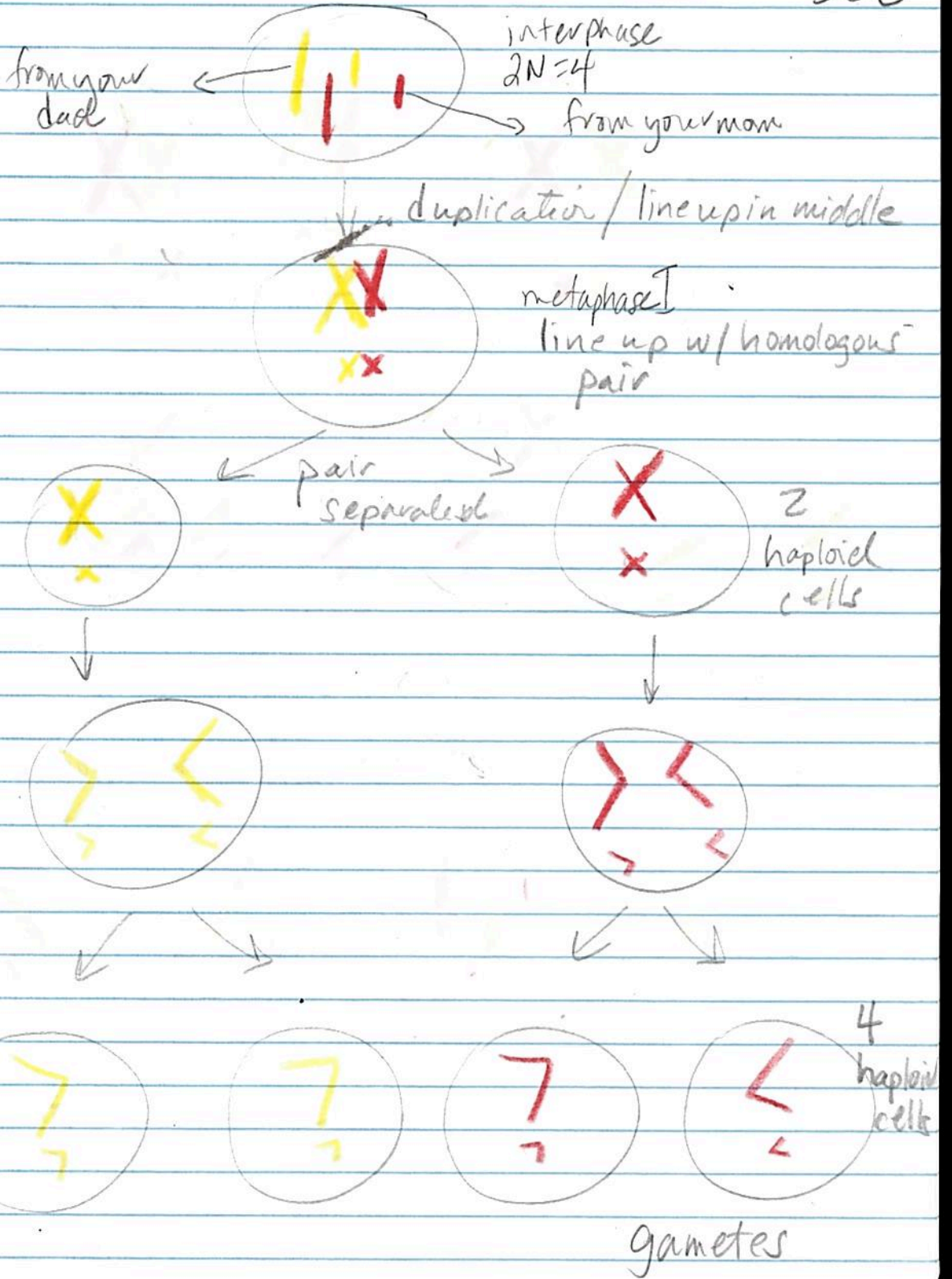


diploid

$2N=4$
2 cells

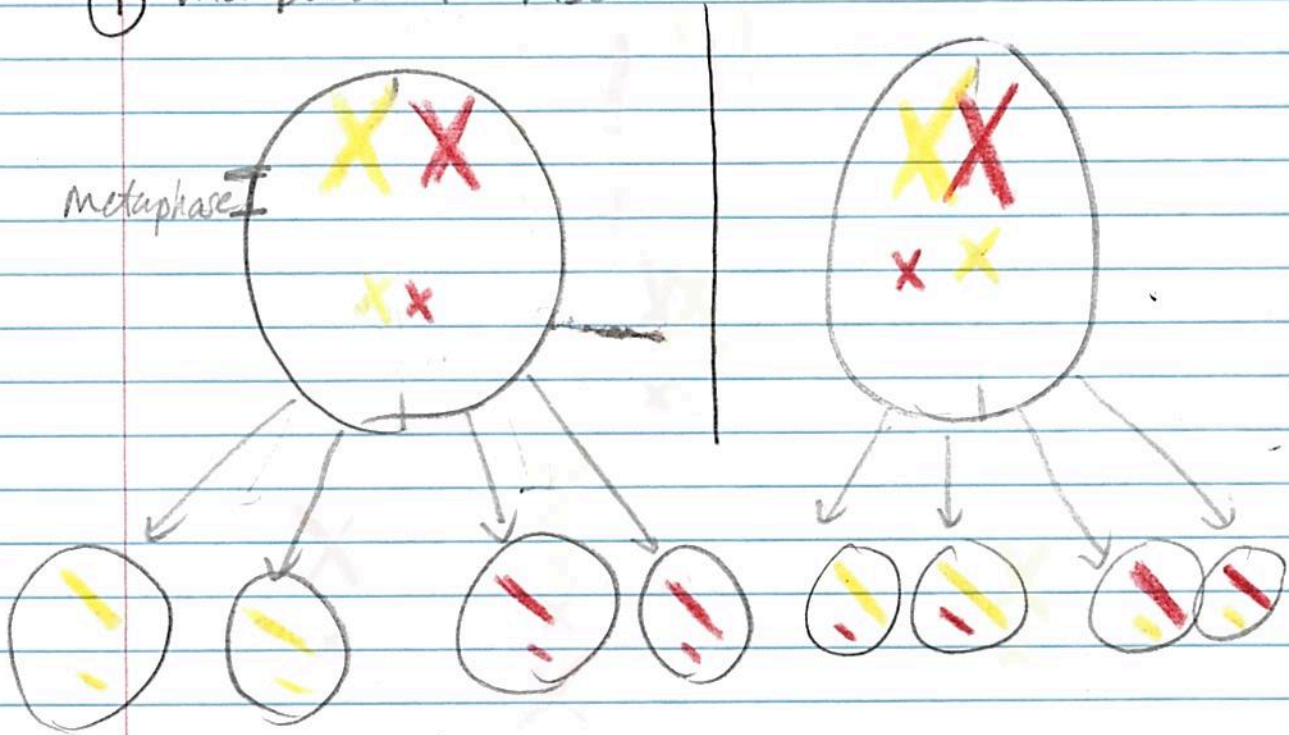
MEIOSIS

366



36c Genetic Variation

① Independent Assortment

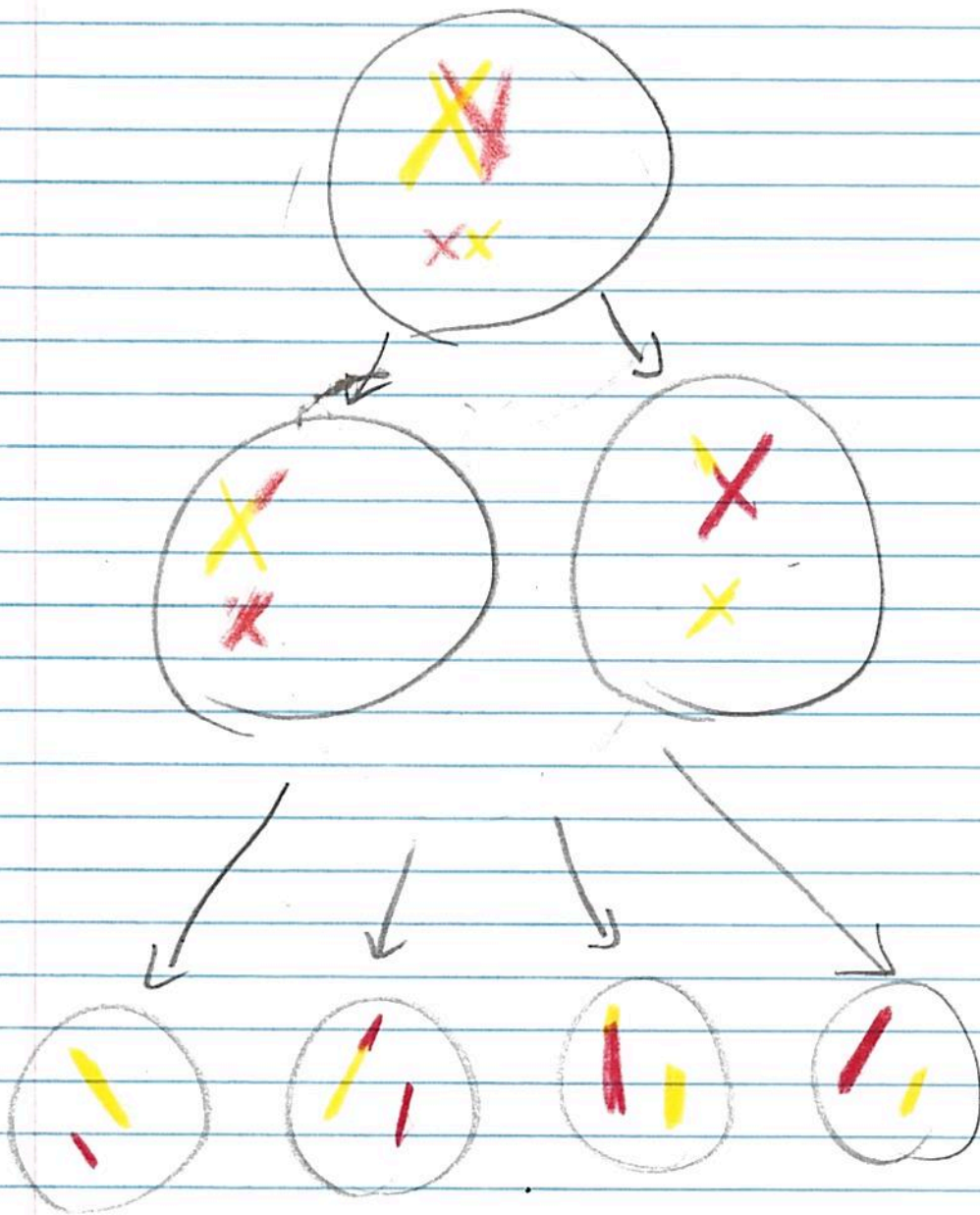


- each chromosome aligns independently of others.

$2^{23} \approx 8$ million possible gametes

Crossing Over

36d



- non sister chromatid exchange portions with each other.

Infinite Possibilities