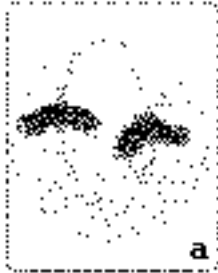


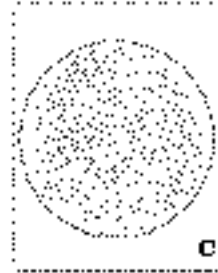
1. (3 points) Here are three diagrams of cells. a and b are in stages of mitosis. Below each diagram indicate the specific stage.



stage _____



stage _____



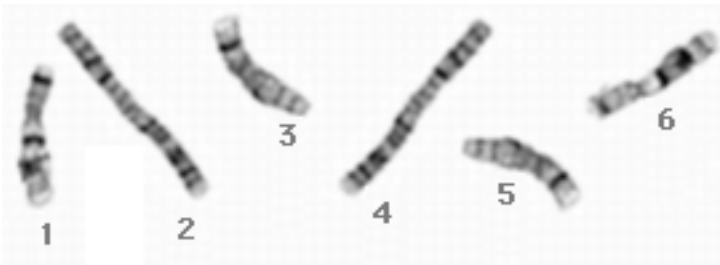
stage _____

2. (2 points) Each human chromosome has a distinctive sequence of light and dark staining bands. Here are diagrams of some of the chromosomes one might put into a karyotype. Which of them would be paired on the karyotype sheet?



- a) ___ and ___
- b) ___ and ___
- c) ___ and ___
- d) ___ and ___

3. (3 points) Here are some pictures of real banded chromosomes in the late prophase stage of mitosis. Which go together?



- a) ___ and ___
- b) ___ and ___
- c) ___ and ___

4. (2 points) How does one decide which chromosomes are autosomes and which are sex chromosomes?