

# **Dog Populations**



#### **Predict**

- If you start with 1 unspayed female dog and her mate, and all of their puppies, and if none are ever neutered or spayed, how many dogs will you have in a year?
  - What about 3 years?
  - What about 6 years?



# How did we get to 67,000 in 6 years?

## **Golden Retrievers**



Average lifespan: 10-12 years

# One litter



#### Some information

- A female golden retriever can get pregnant once she enters proestrus (around 14 months). Each cycle lasts about a week and repeats 1-2 times a year.
- Gestation period: 62 days
- A male golden retriever can breed starting at age 6 months.

### Given this information...

 How long would it take to get to 1 million golden retrievers?