

Matlab Homework: Line of Best Fit

1. Dataset 1: The ratio of length to width of a kangaroo's nose.



The data is written as a Matlab file named `GrayKanga.m`. To load the data into Matlab, type (or write in your script): `Gray Kanga` (without the `.m`).

When you load it, you'll see a matrix Y that is 45×2 . The first column is a measurement (in tens of millimeters) of the length of a gray kangaroo's nose. The second measurement (in tens of millimeters) is the width.

We want to find a linear relationship between the columns- we'll take the first column to be our "x-" values, and the second to be our "y-" values, and we want to determine m, b so that

$$y = mx + b$$

- (a) Use Matlab to find m, b
- (b) Use Matlab to plot the line and the data.
- (c) Interpret what the slope means in terms of the kangaroo's nose.