

DoNow practice for familiarity and speed

Name:

Work these problems rapidly on lined paper, developing a standard method
(worked answers)

Vector dot product is zero for perpendiculars

1. Given perpendicular vectors \mathbf{a} and \mathbf{b} (use vertical vector notation). Find k

Calculate univariate summary statistics of frequency table data with list function

2. Given (horizontal) table of values with frequencies, write down mean, sd, median, Q_1 , Q_3 , IQR, range. (label box plot)

Linear regression

3. Given table, find equation parameters, r , characterize r , and find $f(x)$ given x
4. Exponential fit
5. Manual fit, mean x and y , note $f(0)$

Probability

6. Given $P(A)$ and B , find intersection, union, operations with complements
7. Calculations given independence and mutual exclusivity, test for both
8. Venn 2- and 3-circles, with various shadings, labels and inserted values
9. Given table of values, find probabilities and contingent probabilities

Binomial distribution

10. operations with complements, i.e. $1 - B_{CDF}(10, 8, 0.25) = B_{CDF}(10, 1, 0.75)$