

BMGT 404 Homework 7 Python

What to turn in

Turn in your answers (Python codes and corresponding outputs) through ELMS by **10:00AM on Wednesday, May 3rd**.

Q1. Linear Algebra (30pts)

Bob invested \$10,000 on two mutual funds one year ago. After one year, the overall yield rates for these two mutual funds are +2% and +4%. His yearend account showed \$10,250. How much did he initially put onto two mutual funds?

Q2. Optimization - Curve Fit (50pts)

Given 16 pairs of prices (as dependent variable) and corresponding demands (as independent variable), use the curve fitting tool to estimate the best fitting linear, exponential, logarithmic, and power curves.

Price	Demand
127	3420
134	3400
136	3250
139	3410
140	3190
141	3250
148	2860
149	2830
151	3160
154	2820
155	2780
157	2900
159	2810
167	2580
168	2520
171	2430

Q3. Statistics - Linear Regression (20pts)

Given 16 pairs of prices (as dependent variable) and corresponding demands (as independent variable), use the linear regression tool to estimate the best fitting linear line.

Price	Demand
127	3420
134	3400
136	3250
139	3410
140	3190
141	3250
148	2860
149	2830
151	3160
154	2820
155	2780
157	2900
159	2810
167	2580
168	2520
171	2430