

Homework 1*Handed Out: January 11**Due: January 25***Name:** Jingxuan Bao**PennKey:** bjx**PennID:** 82897132

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1 Multiple Choice & Written Questions

1. (a) A
(b) B
2. (a) B
(b) A
3. (a) C
(b) B
4. (a) D
(b) $\text{Variance}(X) = E[(x - E(X))^2] = E[x^2 - 2XE(X) + E(X)^2] = E(X^2) - 2E(X)E(X) + E(X)^2 = E(X)^2 - E(X^2)$
5. (a) B
(b) A
(c) D

2 Python Programming Questions

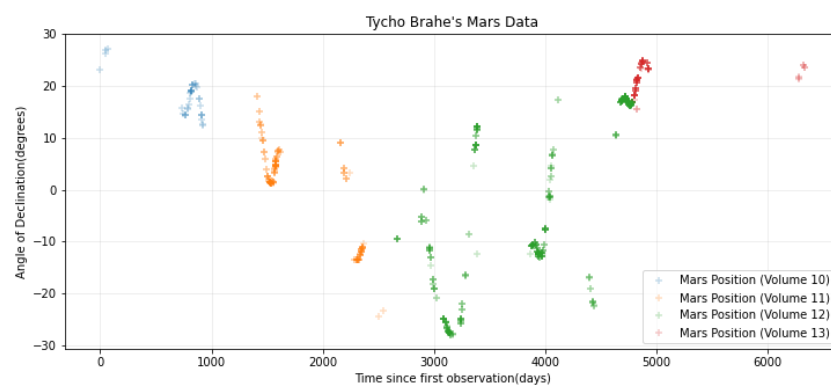


Figure 1: Figure for Q4 (Matplotlib)