

Name: \_\_\_\_\_

MATH 100

Fall 2023

HW 2: Due 09/13

*"I wasn't a failed DJ. I was  
pre-successful."*

*–Jason Mendoza, The Good Place*

**Problem 1.** (10pt) Your history class course grade is determined by the following components:

Homeworks	25%
Paper I	10%
Paper II	10%
Paper III	10%
Project	30%
Quizzes	15%

Suppose that your homework average was 82%, your grades on the papers were 68%, 84%, and 76%, respectively, your project grade was 88%, and your quiz average was 94%.

- (a) Compute your course average.
- (b) If the project was a final project that had not yet occurred, i.e. you had not yet received the 88%, but all the other course grades were as listed above, then what is your current course average?

**Problem 2.** (10pt) Suppose you received the following grades this semester:

Course	Credits	Grade
BIO 101: Human Biology	3	B
MATH 104: Precalculus	4	B+
RELS 102: Religion and Society	3	A-
ENG 207: Writing about World Mythology	3	B-
ECON 102: Principles of Microeconomics	3	C+

Given the following grade weights,

Grade	Weight	Grade	Weight
A	4.0	C+	2.3
A-	3.7	C	2.0
B+	3.3	C-	1.7
B	3.0	D	1.0
B-	2.7	F	0

- (a) Compute your semester GPA.
- (b) If your previous GPA based on 67 credits was 3.308, what is your current overall GPA?

**Problem 3.** (10pt) Showing all your work, convert the following:

- (a) 0.4 megagrams to centigrams
- (b) 87 oz to stones [1 oz = 28.35 g, 1 stone = 6.35 kg]
- (c) \$98 per hour to MXP per minute [\$0.057 = 1 MXP]
- (d) 6,000 ft<sup>2</sup> to mi<sup>2</sup> [5280 ft = 1 mi.]
- (e) 0.05 meters per square second to feet per square hour

**Problem 4.** (10pt) Suppose you are talking with your friend who has moved to Germany. The conversation has drifted to NYC housing. Currently, the cost of space in NYC is approximately \$1,600 per square foot.

- (a) For your friend, convert this to Euros per square meter. [ $\text{€}1 = \$1.07$ ;  $1 \text{ ft} = 0.3048 \text{ m}$ ]
- (b) Using (a), find the conversion factor from dollars per square foot to Euros per square meter.
- (c) Use your answer from (b) to convert \$1,845 per square foot to Euros per square meter.