

Notes More Weighted Averages

7th Grade Math

Name: Key

Grade Point Averages

1. Many colleges and universities use a weighted average grading system. Courses that are worth more credits have a bigger influence on your grade. Letter grades correspond to the numerical grades show below:

A	=	4	B -	=	2.7	D +	=	1.3
A -	=	3.7	C +	=	2.3	D	=	1
B +	=	3.3	C	=	2	D -	=	0.7
B	=	3	C -	=	1.7	E	=	0

- a. Evaluate the GPA for both scenarios for the student who received the following grades:

Calculus	4 credits	D -	Chemistry	4 credits	D
English Lit.	3 credits	A	Computer Sci.	3 credits	B +
History	3 credits	A			

Scenario 1: GPA average weighted based on credits
Like colleges or universities

Total credits
17

Scenario 2: GPA average NOT weighted like the JH

$$4 \cdot .7 + 3 \cdot 4 + 3 \cdot 4 + 4 \cdot 1 + 3 \cdot 3.3$$

$$2.8 + 12 + 12 + 4 + 9.9$$

Total weighted credits 40.7 \rightarrow GPA $\frac{40.7}{17} = 2.394$

$$GPA = \frac{.7 + 4 + 4 + 1 + 3.3}{5}$$

$$GPA = \frac{13}{5} = 2.6$$

- b. Evaluate the GPA for both scenarios for the student who received the following grades:

Humanities	3 credits	B -	Calculus	4 credits	C -
Weightlifting	2 credits	A	Communications	3 credits	A

Scenario 1: GPA average weighted based on credits
Like colleges or universities

Total credits
12

Scenario 2: GPA average NOT weighted like the JH

$$3 \cdot 2.7 + 2 \cdot 4 + 4 \cdot 1.7 + 3 \cdot 4$$

$$8.1 + 8 + 6.8 + 12$$

Total weighted = 34.9
Credits

$$GPA = \frac{2.7 + 4 + 1.7 + 4}{4}$$

$$GPA = \frac{12.4}{4} = 3.1$$

$$GPA = \frac{34.9}{12} = 2.908$$