

## WebCT Gradebook: Formulas for Calculated Columns

To use these formulas, create a column in Manage Students and choose the option **calculated**. Use the **setup column** button to go to the **Calculation Editor**.

**Calculation Editor:**

Formula:

(	)	CE	C	Column:	Q1	Insert		
7	8	9	/	Function:	sum	Start list	Next item	End list
4	5	6	*					
1	2	3	-					
0	.	+						

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Update Cancel

**NOTE: Spaces are included in formulas below for visual clarity. Do not use spaces in Calculation Editor. We used quizzes as our example, you may substitute homework, tests, labs, discussion, etc.**

- 1. Calculating Quiz Percentage** (Make “Quiz %” column; choose **calculated column** option)  
(This example shows 5 quizzes worth 25 points each, and the total quiz score is 10% of the total semester grade.)

$$(( \text{sum} \{ [Q1] , [Q2] , [Q3] , [Q4] , [Q5] \} ) * 10 ) / 125$$

**To do this step-by-step:**

Click **left parenthesis** button twice

Function: **sum**

Click **Start list** button to start sum list (automatically adds left curly bracket)

Column: **Q1**

Click **Insert** button

Click **Next item** button

Repeat above three steps through last Column (Q5)

Click **End list** button to end sum list (automatically adds right curly bracket)

Click **right parenthesis** button

Click **multiply** button (\*)

Click **number** buttons to enter percent of total grade – 10 in this example

Click **right parenthesis** button

Click **divide** button (/)

Click **number** buttons to enter total number of quiz points – 125 in this example

NOTE: An alternate way to do this is with addition instead of sum function, alternating Column: **Q1**; Click **Insert** button; Click **addition** button (+)

$$(( [Q1] + [Q2] + [Q3] + [Q4] + [Q5] ) * 10 ) / 125$$

- 2. Total Points** (Make “**Total Points**” column; choose **calculated column** option)  
(This example shows that quizzes, tests, homework, discussion, labs, and a project make up the final grade. Each of these has a column made as in #1 above.)

$$\text{sum } \{ [Quiz \%], [Test \%], [HW \%], [Discuss \%], [Lab\%], [Project \%] \}$$

**OR**

$$[Quiz \%] + [Test \%] + [HW \%] + [Discuss \%] + [Lab\%] + [Project \%]$$

- 3. Drop Lowest Quiz Grade and Find Quiz Percentage**  
(Make “**Quiz %**” column; choose **calculated column** option)  
(This example shows 5 quizzes worth 25 points each, the lowest (min) quiz grade is dropped (25 possible points removed from total quiz points), and the total quiz score is 10% of the total semester grade.)

$$(( (\text{sum } \{ [Q1], [Q2], [Q3], [Q4], [Q5] \}) - (\text{min } \{ [Q1], [Q2], [Q3], [Q4], [Q5] \})) * 10 ) / 100$$

- 4. Find Quiz Average**  
(Make “**Quiz Avg**” column; choose **calculated column** option)  
(This example shows 5 quizzes worth 25 points each)

$$(\text{sum } \{ [Q1], [Q2], [Q3], [Q4], [Q5] \}) / 5$$

- 5. Drop Lowest Quiz Grade and Find Quiz Average**  
(Make “**Quiz Avg**” column; choose **calculated column** option)  
(This example shows 5 quizzes worth 25 points each, the lowest (min) quiz grade is dropped (1 quiz removed from total number of quizzes).

$$(( (\text{sum } \{ [Q1], [Q2], [Q3], [Q4], [Q5] \}) - (\text{min } \{ [Q1], [Q2], [Q3], [Q4], [Q5] \})) / 4$$

**NOTE:** Don't forget to go to **Manage Students > Manage Columns > Organize Columns**. For each calculated column, set **Hidden** to **NO** and **Released** to **YES**. This will enable students to see the results of the calculation.

**Special thanks to Aditi Patel for providing these formulas.**