

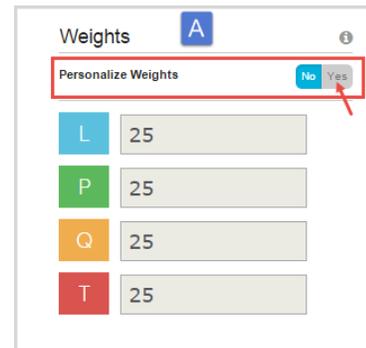
Quick Tip: How grades (scores) are calculated for assignments, units, and courses

This Quick Tip explains how grades (scores) are calculated for Ignitia® assignments, units, and courses.

Ignitia currently has two available roll-ups - the unit score roll-up and the course score roll-up. The scope of the unit roll-up is all assignments in that unit. Similarly for the course; it is all units in the course.

A *unit* is made up of *assignments*. Ignitia has four assignment types: Lessons, Projects, Quizzes, and Tests. Each assignment type has a *weighting value* that determines the assignment type's relevance to the overall course grade for the unit. Weighting values can be set at the school level, individual student level, and at the enrollment level.

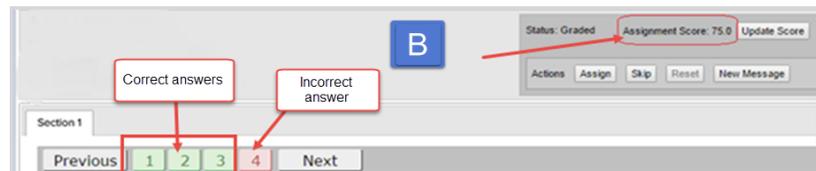
Example A shows the assignment weights for an enrollment. If the teacher or admin creating the enrollment decides to "personalize" the weight values for the enrollment, the **Personalize Weights** setting must be set to **Yes** and then the course enrollment assignments would follow the new weight values. Otherwise, the enrollment inherits the default school weights.



How assignment grades(scores) are calculated

Each assignment, no matter how many questions, is worth 100% and each question carries an equal value to the assignment.

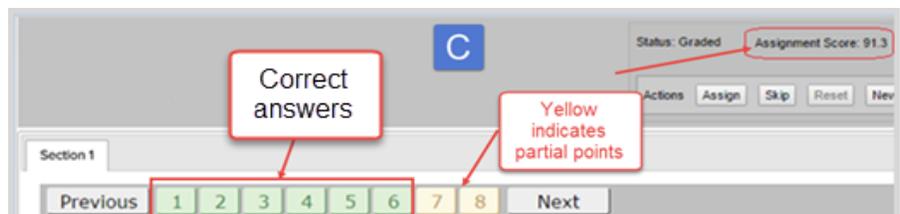
The assignment in example B has four questions. Therefore, each question is worth 25% ($100/4=25\%$). Three of the four questions have Correct answers, indicated by the Green background color, and the question with the Incorrect answer is indicated by the Red background color. So, the assignment score is $3 * 25\%$ or 75.0.



Now, let's look at an assignment that has eight questions; six that have correct answers and two with partially correct answers indicated by the Yellow background color. So, for this assignment, each question is worth 12.5% ($100/8=12.5$). The assignment is showing an overall score of 91.3% and the following examples show how this score was calculated.

Example C shows that six of the questions have correct answers, indicated by the Green background color.

Calculates to: $6 * 12.5 = 75\%$



Example D shows that Question 7 was worth 10 points, but the student received 7 points, which equals 70%.

Calculates to: $12.5 * 70\% = 8.75\%$



Example E shows that Question 8 was worth 10 points, but the student received 6 points, which equals 60%.

Calculates to: $12.5 * 60\% = 7.5\%$



So, the overall grade for the assignment is the sum of its question values:

- $75\% + 8.75\% + 7.5\% = 91.25\%$

The assignment grade has been rounded up to **91.3%**.

Tip It is important to remember that if a teacher decides to skip a question in a graded assignment, Ignitia automatically recalculates the assignment score because the skipped question no longer counts towards the assignment total.

How unit grades are calculated

Now that we know how to calculate an assignment score, let's calculate the weighted grade for a unit. To calculate the weighted grade for each assignment type, refer back to the weights shown in example A above. The default values are:

- Lesson Weight - **25%**
- Project Weight - **25%**
- Quiz Weight - **25%**
- Test Weight - **25%**

Step 1: Look at the number of assignments and grades for each type for the unit

- 10 Lessons with grades of: 96, 87, 32, 83, 94, 77, 96, 88, 79, 63
- 4 Projects with grades of: 72, 85, 97, 98
- 3 Quizzes with grades of: 99, 100, 62
- 1 Test with a grade of: 93

Step 2: Calculate an average for each assignment type and multiply that average by the assignment type weight to get a Unit Grade by Type

To calculate an average, add all grades for each type and then divide by the number of assignments.

Assignment Type	Grades	Total	No of Assignments	Average	Weight	Unit Grade by Type
Lesson	98 + 87 + 32 + 83 + 94 + 77 + 96 + 88 + 79 + 63	797	10	79.7	25%	19.925
Project	75 + 85 + 97 + 98	355	4	88.75	25%	22.1875
Quiz	99 + 100 + 62	261	3	87	25%	21.75



Assignment Type	Grades	Total	No of Assignments	Average	Weight	Unit Grade by Type
Test	93	93	1	93	25%	23.25
Weighted Grade for Unit						87.1125

Step 3: Add the Unit Grades for each assignment type to calculate the Weighted Grade for the Unit

The weighted grade for the unit is 87.1125 which is then rounded up to **87.11%**.

How course grades are calculated

To calculate the course score roll-up, you need to look at the unit scores and the number of units in the course. Let's take a simple example of a course with 10 units. Once you have each unit score, add them up and then divide by the number of units.

So, the overall grade for the course is the sum of its units divided by the number of units:

- $75\% + 85\% + 80\% + 72\% + 80\% + 87\% + 90\% + 92\% + 85\% + 90\% = 836\% / 10 = 83.6$

The course grade is then **83.6%**.