

**oac vs grade 12:  
anything new and exciting?**

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**Sample: 288 students (one section of first-year,  
first-term calculus)**

**oac ... 142                      grade 12 ... 116  
[oac & gr12 ... 22; unknown ... 8]**

**oac calc ... 142                      gr12 afic ... 116  
oac fin ... 93                      gr12 g&d ... 58  
oac a&g ... 104                      gr12 mdm ...36**

**avg ... 88.5%                      avg gr12 ... 86.3%  
avg oac                      avg gr12  
courses ... 2.39                      courses ...1.81**

### Population Features (age)

oac avg ... 19.6	gr12 avg ... 18.2
oac mode ... 19	gr12 mode ... 18.3
oac range ... 17.9-25.2	gr12 range ... 16.9-19.2

[youngest person: f, 16y 11m, foreign]

### Mac calculus: in-class and final success

	oac	gr12 [percent]
quizzes	83.3	78
test 1	77.4	75.8
test 2	71.7	71.5
exam	70.4	68.4
course grade	73.9 (B)	69.1 (C+)
fails	8/142 (5.6%)	11/116 (9.5%)

**Math Background Survey (early Sept 2003)**  
**Where/how do cohorts differ**

	oac	gr12	[percent]
1(c) [log rule]	48.6	54.4	
11 [log eq]	22.3	11.4	
2(a) [revenue]	37.8	49.1	
2(b)	8.1	14.0	

**Where/how do cohorts differ**

	oac	gr12	[percent]
3(a)[quadratic]	25.7	40.4	
10 [quad, graph]	73.0	57.9	
4(a) [ball]	56.8	41.2	
4(b)	52.0	65.8	

### Where/how do cohorts differ

	oac	gr12	[percent]
6(a) [velocity]	55.4	62.3	
6(b)	38.5	42.1	
7 [frac, eq]	85.8	79.8	
8 [exp eq]	73.0	68.4	
5 [range]	43.2	29.8	
9 [comp]	74.3	70.2	

### Comments

OAC students are somewhat better prepared [in the material directly related to the calculus course]

#### Evidence:

- survey data
- average number of oac/gr12 courses/person higher for oac students
- age -> exposure/experience with math content