Calculus Readiness Assessment

University of Toronto Mississauga High School Teacher Workshop

May 1, 2019

Calculus Readiness Assessment

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Purpose: Serves as a self-diagnostic tool for precalculus material. What does it cover?

 General Functions (even/odd, domain, composition, translation and dilation)

Calculus Readiness Assessment

- General Functions (even/odd, domain, composition, translation and dilation)
- Plane Geometry (Equation of a line, parallel and perpendicular lines)

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- Plane Geometry (Equation of a line, parallel and perpendicular lines)
- Basic Algebra (absolute values, inequalities, expression manipulation)

Calculus Readiness Assessment

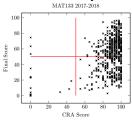
- General Functions (even/odd, domain, composition, translation and dilation)
- Plane Geometry (Equation of a line, parallel and perpendicular lines)
- Basic Algebra (absolute values, inequalities, expression manipulation)
- Specific Functions (Polynomials, Exponents, Logarithms, Trigonometry)

Calculus Readiness Assessment

Written entirely online:

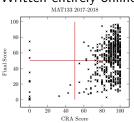
Calculus Readiness Assessment

Written entirely online:





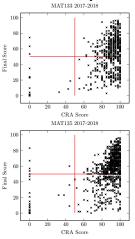
Written entirely online:



Avg: CRA 87 Final 54 Correlation: r = 0.363

Calculus Readiness Assessment

Written entirely online:



Avg: CRA 87 Final 54 Correlation: r = 0.363

Avg: CRA 87 Final 56 Correlation: r = 0.478

MAT133	MAT135
404 students	1406 students

MAT133	MAT135
404 students	1406 students
Online Practice	Online Practice

MAT133	MAT135
404 students Online Practice	1406 students Online Practice
In class	Online

MAT133	MAT135
404 students	1406 students
Online Practice	Online Practice
In class	Online
6%	3%

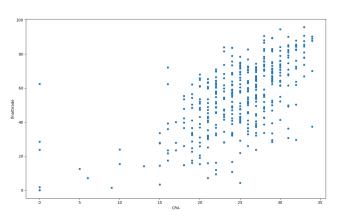
Calculus Readiness Assessment

MAT133	MAT135
404 students	1406 students
Online Practice	Online Practice
In class	Online
6%	3%

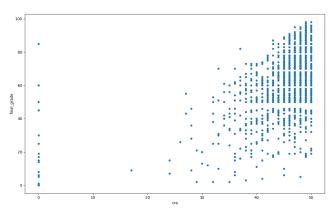
Did something change?

Calculus Readiness Assessment

MAT133 (Written in class)



MAT135 (Written online)



Stats!

	MAT133	MAT135
CRA Avg	69	88
Final Avg	54	60
Corr	0.623	0.590

Stats!

Calculus Readiness Assessment

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• There is moderate correlation.

	MAT133	MAT135
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- There is moderate correlation.
- Correlation decreases as the term progresses