Math Pathways

Description and Report

Math Pathways - What are they? Why have them?

What:

- **Differentiated** path of courses that fit each student's needs in math
- **Flexible** program where students are re-evaluated each year
- **Standards** based curriculum to meet all the demands of students

Why:

- **Prepare** students for mathematics in high school and college
- **Meet** current students' needs in their development in math
- **Supply** maximum support for students on all levels
- **Provide** avenues of extension for students who excel at math and may want to pursue a career in the math field

The Pathways

Ashford School Math Pathways

Grade	5	6	7	8	9	10	11	12
Pathway 1	5th grade IM standard curriculum	6th grade IM standard curriculum	7th grade IM standard curriculum	8th grade IM standard curriculum	Algebra 1	Geometry	Algebra 2	Elective Math
Pathway 2	5th grade IM standard curriculum	6th grade IM standard curriculum w/ enrichment	7th grade standard IM curriculum w/ enrichment	Algebra 1	Geometry	Algebra 2	Pre-Calculus	Calculus or AP Stats
Pathway 3	5th grade IM standard curriculum w/ enrichment	6th/7th grade Accelerated IM Math	Algebra 1	Geometry	Algebra 2	Pre-Calculus	Multi-variable Calculus	Uconn Math Course or AP Stats

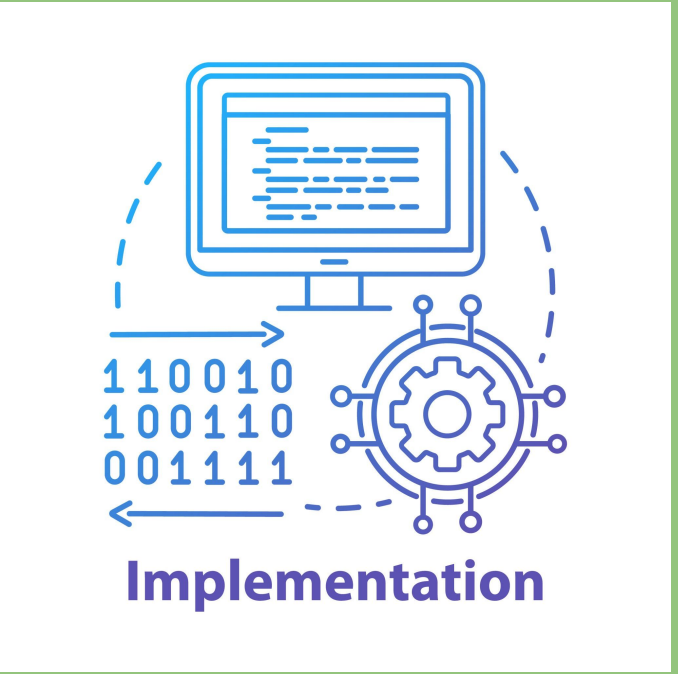
Important Notes:

* IM - Illustrative Math Curriculum
* A student can move up a pathway freshman year by taking Geometry and Algebra 2 at the same time
* both pathway 2 & 3 will allow students to take AP & AD (Uconn specific) classes

How is it going?

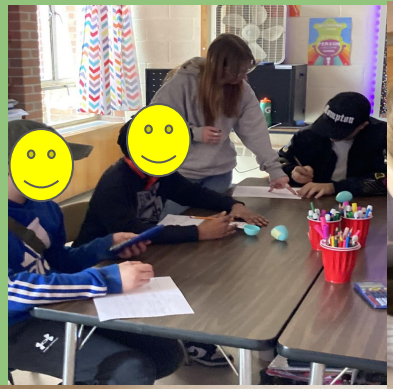
<u>First year of full implementation:</u>

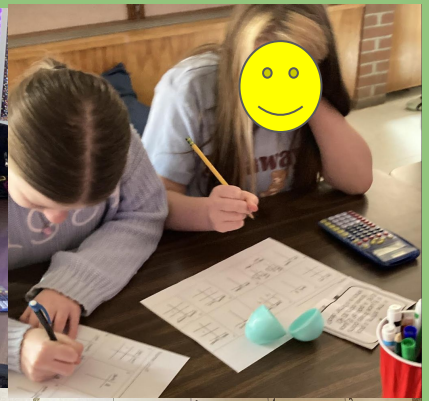
- Students are engaged at their learning level
- Students at the different levels have expressed that the curriculum is not too slow or too fast
- Allows for more targeted instruction, enrichment, and intervention
- Positive parent feedback

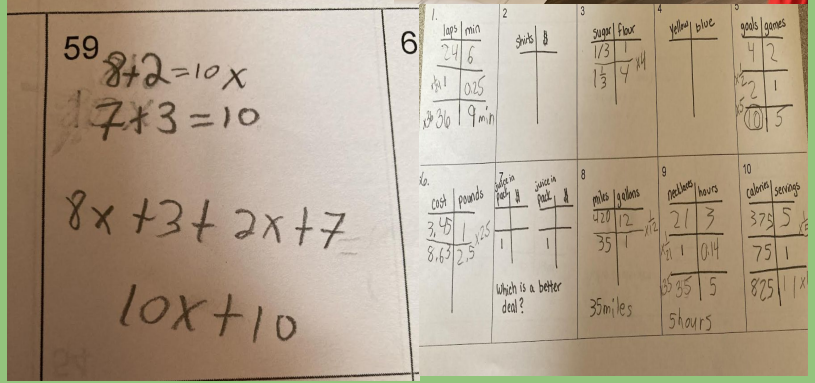


Pathways in Action!

Grade 6- Review Egg Hunt

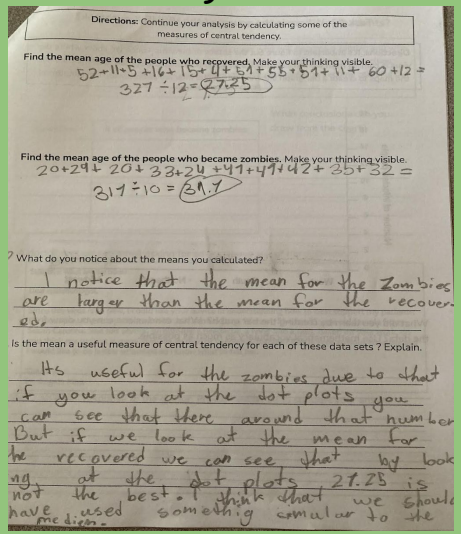


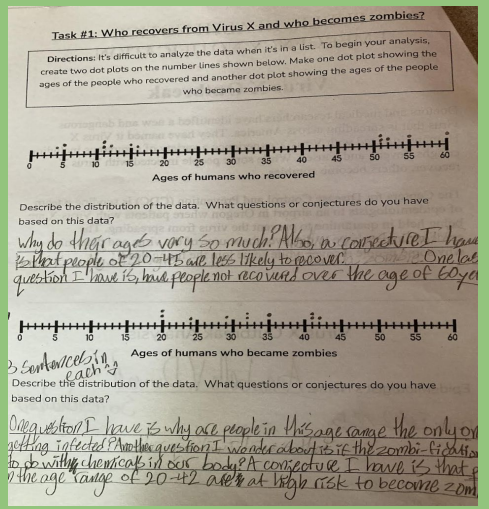




Grade 6- Math/Science Field Trip to SHU: *Mission Mars*

Grade 6- Math Enrichment- Virus X Statistics Project





C = Point(f)
= (-2.27, -0.04, 4.31)

D = Intersect(zAxis, yAxis)
= (0, 0, 0)

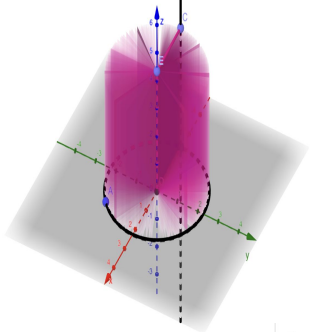
E = Point(zAxis)
= (0, 0, 4.33)

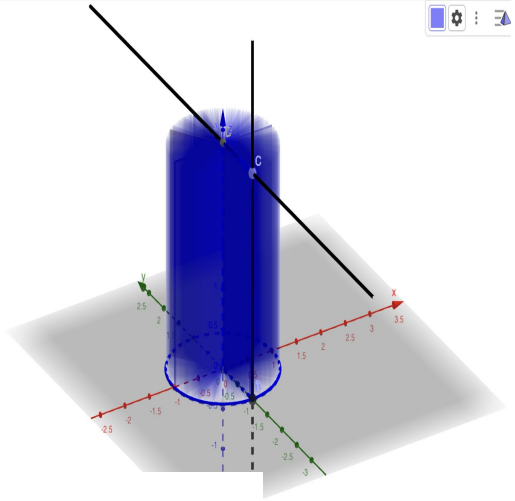
b = Segment(B, C, q1)
= 4.31

c_1 = Segment(C, E, q1)
= 2.27

d = Segment(D, B, q1)
= 2.27

e = Segment(E, D, q1)
= 4.33





D = (0, 0, 0)

C = (0, 0, 1)

g = Segment(B, D)
= 1

h = Segment(C, D)
= 1

f : PerpendicularLine(B, xOyPlane)
= X = (0.95, 0.32, 0) + λ (0, 0, 1)

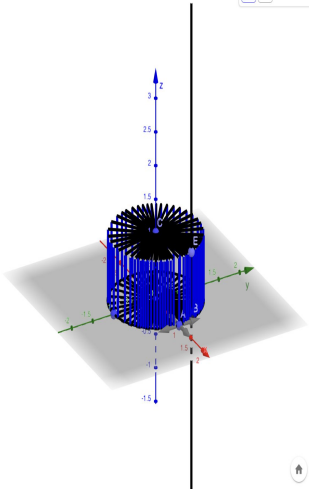
E = Point(f)
= (0.95, 0.32, 1)

i = Segment(E, C)
= 1

j = Segment(E, B)
= 1

F = (6.12323399573676 · 10^{-17}, −1, 2)
= (0, -1, 0)

Input...



A = Point(xAxis)
= (1, 0, 0)

c : Circle(zAxis, A)
= X = (0, 0, 0) + (cos(t), sin(t), 0)

B = Point(c)
= (-0.19, -0.98, 0)

C = Point(zAxis)
= (0, 0, 3)

f = Segment(C, B)
= 3.16

D = Point(xAxis)
= (0, 0, 0)

g = Segment(B, D)
= 1

h = Segment(D, C)
= 3

Input...