

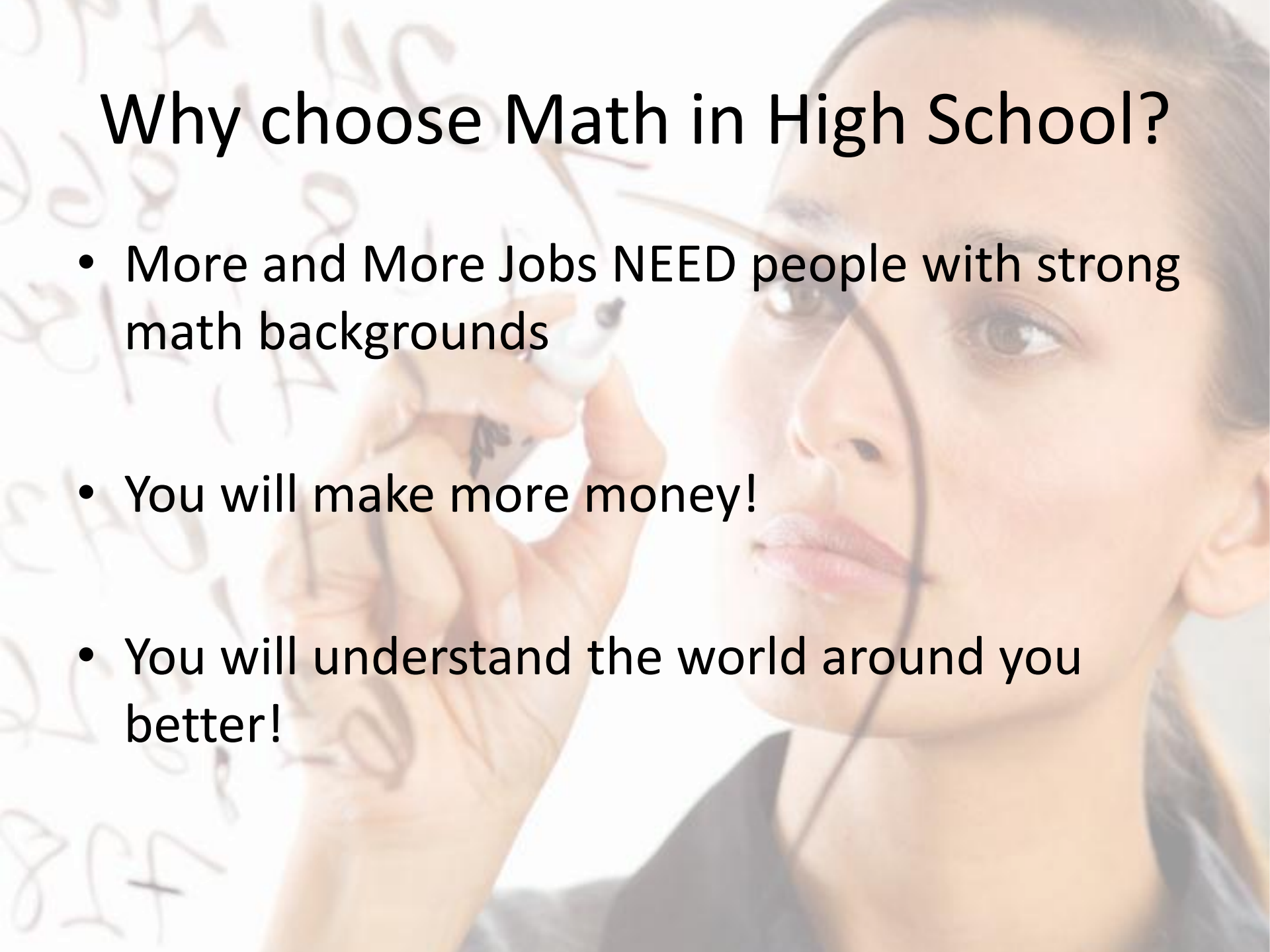


Blaine High School

Math Course Offerings

Why choose Math in High School?

- More and More Jobs NEED people with strong math backgrounds
- You will make more money!
- You will understand the world around you better!



Why choose Math in High School?

- You will be more prepared for college.
- Math looks good on your transcripts!
- Why pay for it in college when you can get it FREE in high school!

Math Requirements

- ALL students are required to have 3 credits in math.
- You **MUST** take: Algebra, Geometry, Statistics and Probability and one extra $\frac{1}{2}$ credit of another math.
- College Bound students are encouraged to take as much math as possible!

Course Offerings

Your counselor or math teacher can show you a flow chart to help you decide what math classes to take during your high school career, if the next 3 slides are confusing for you...

High School Math Registration 2015-16

3 credits required:	Required math coursework
1 credit	Intermediate Algebra [1 credit]
1 credit	Geometry [1 credit]
1 credit	Advanced Algebra [1/2 credit] AND Statistics & Probability [1/2 credit] or Advanced Algebra [1/2 credit] AND AP Statistics [1 credit]

<i>Currently: Grade 8</i>	MS Algebra Block	MS Algebra	Intermediate Algebra [H]	Geometry [H]	Advanced Mathematics
<i>Next year take...</i>	Intermediate Algebra *	Intermediate Algebra *	Geometry [H]	Advanced Algebra [H] AND Statistics & Probability or AP Statistics	Ask your Advanced Math teacher for the appropriate course

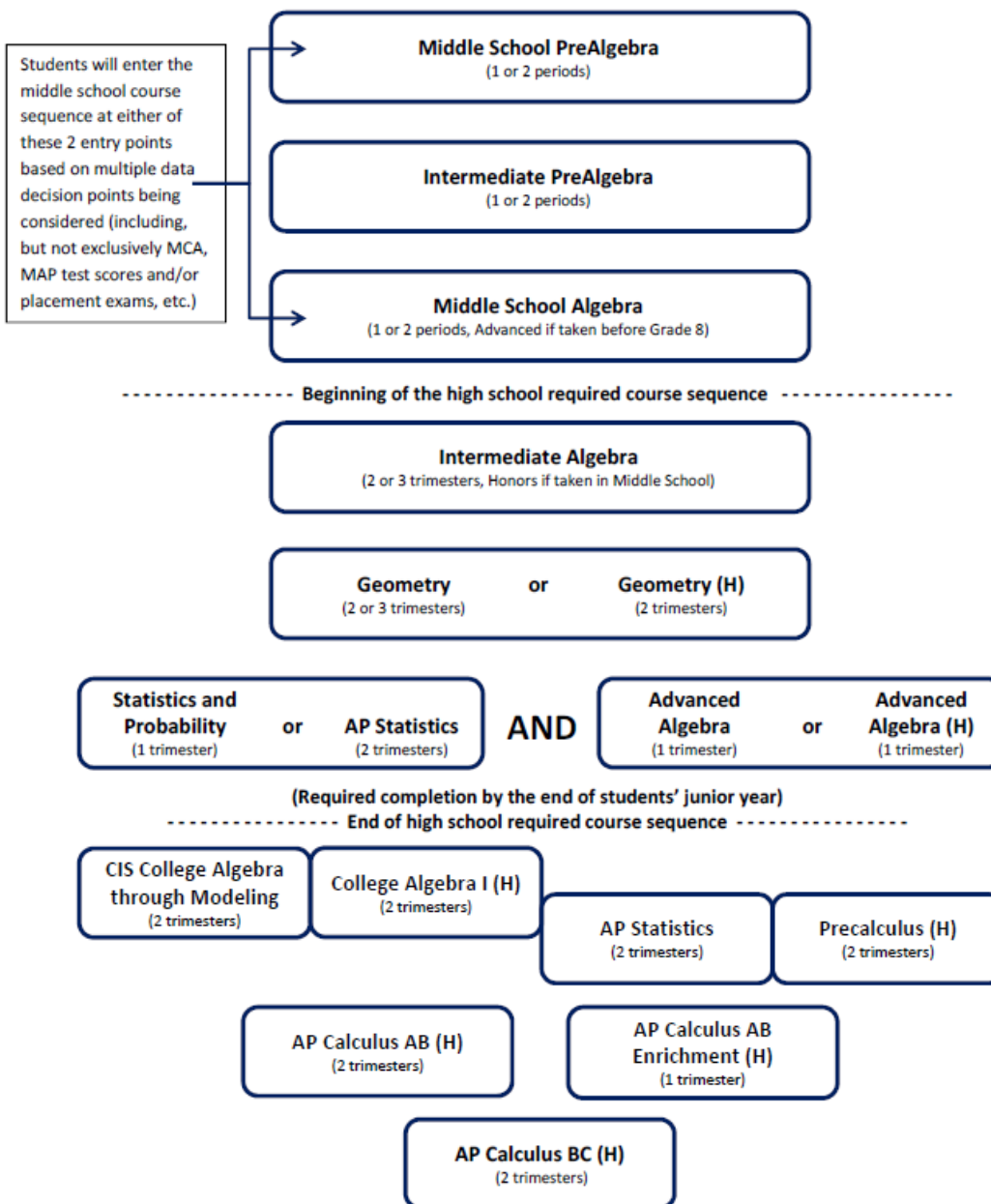
<i>Currently: Grade 9</i>	3-Tri Intermediate Algebra	Intermediate Algebra	Geometry [H]	Advanced Algebra [H] AND Statistics & Probability	Precalculus [H]
<i>Next year take...</i>	Geometry *	Geometry * or Geometry [H]	Advanced Algebra [H] AND Statistics & Probability or AP Statistics	Precalculus [H]	AP Calculus AB **

<i>Currently: Grade 10</i>	3-Tri Geometry or Geometry	Geometry [H]	Advanced Algebra AND Statistics & Probability	Advanced Algebra [H] AND Statistics & Probability or AP Statistics	Precalculus [H]	AP Calculus AB
<i>Next year take...</i>	Advanced Algebra AND Statistics & Probability	Advanced Algebra [H] AND Statistics & Probability or AP Statistics	College Algebra through Modeling [CE] or College Algebra I [H] [CE]	Precalculus [H] or AP Statistics	AP Calculus AB ** or AP Statistics	AP Calculus BC or AP Statistics

<i>Currently: Grade 11</i>	Advanced Algebra AND Statistics & Probability	Advanced Algebra [H] AND Statistics & Probability or AP Statistics	College Algebra through Modeling [CE] or College Algebra I [H] [CE]	Precalculus (H)	AP Calculus AB	AP Calculus BC
<i>Next year take...</i>	College Algebra through Modeling [CE] or College Algebra I [H] [CE]	College Algebra through Modeling [CE] or College Algebra I [H] [CE] or Precalculus [H]	Precalculus [H] or AP Statistics	AP Calculus AB ** or AP Statistics	AP Calculus BC or AP Statistics	AP Statistics

Note: * Students may be placed in an additional trimester of this course using the district placement process.
 ** AP Calculus AB/BC (H) is offered at Blaine HS and Champlin Park HS
 CPHS has IB Math options for 11th and 12th grade students. Check the registration guide for more information.

Anoka-Hennepin Secondary Math Sequence





**SO WHAT ARE MY
OPTIONS???**



Intermediate Algebra

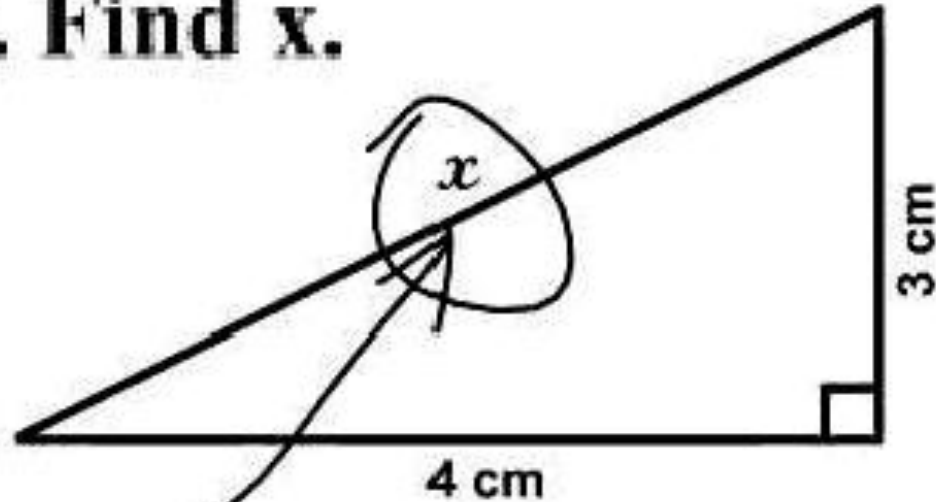
1 Credit/ 2 Trimesters

Who takes it: EVERYBODY!

Prerequisite: Algebra/Middle School
math

Geometry

3. Find x .



Here it is

Learn to find the REAL answer!

Geometry

1 Credit/ 2 Trimesters

Who takes it: EVERYBODY!!!

Prerequisite: Intermediate Algebra 1

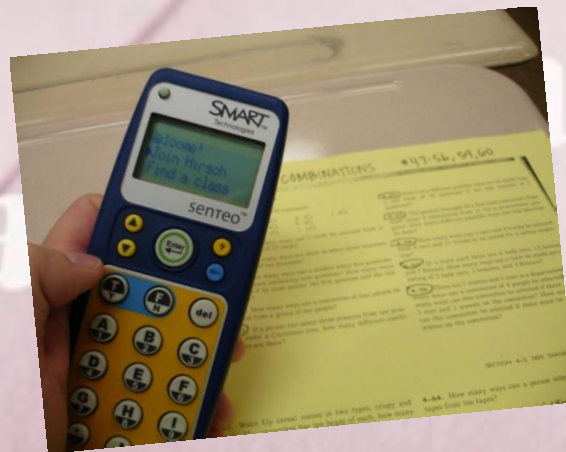
Honors Geometry

1 Credit/2 Trimesters

Who takes it: Students who plan to take more than the required 3 credits or who want to consider AP classes

Prerequisite: Int. Algebra + Teacher Recommendation

Statistics and Probability HANDS ON ACTIVITIES!



Advanced Algebra/Statistics and Probability

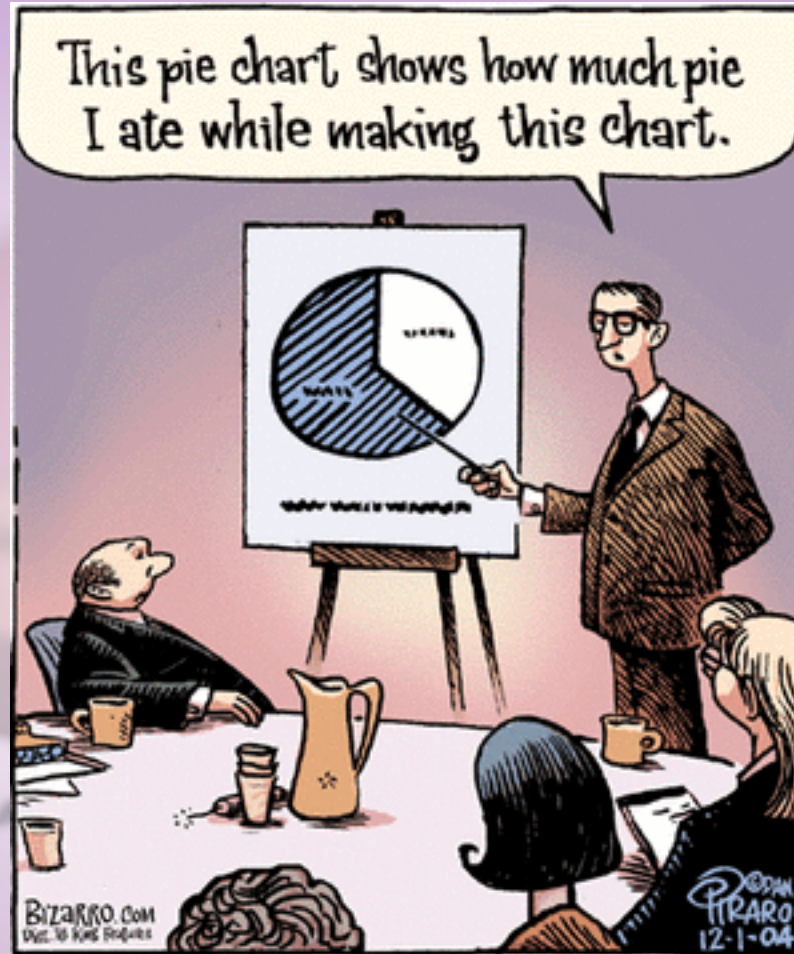
½ Credit/1 Trimester =Adv. Alg.

½ Credit/1 Trimester =Stats&Prob

Who takes it: EVERYBODY!

Prerequisite: Intermediate Algebra
and/or Geometry

Advanced Placement Statistics



Advanced Placement Statistics

1 Credit/2 Trimesters

Who takes it: Those students wishing to earn college credits in high school

Prerequisite:

Honors Adv. Algebra



Algebra and Beyond...

Taking you to new heights...



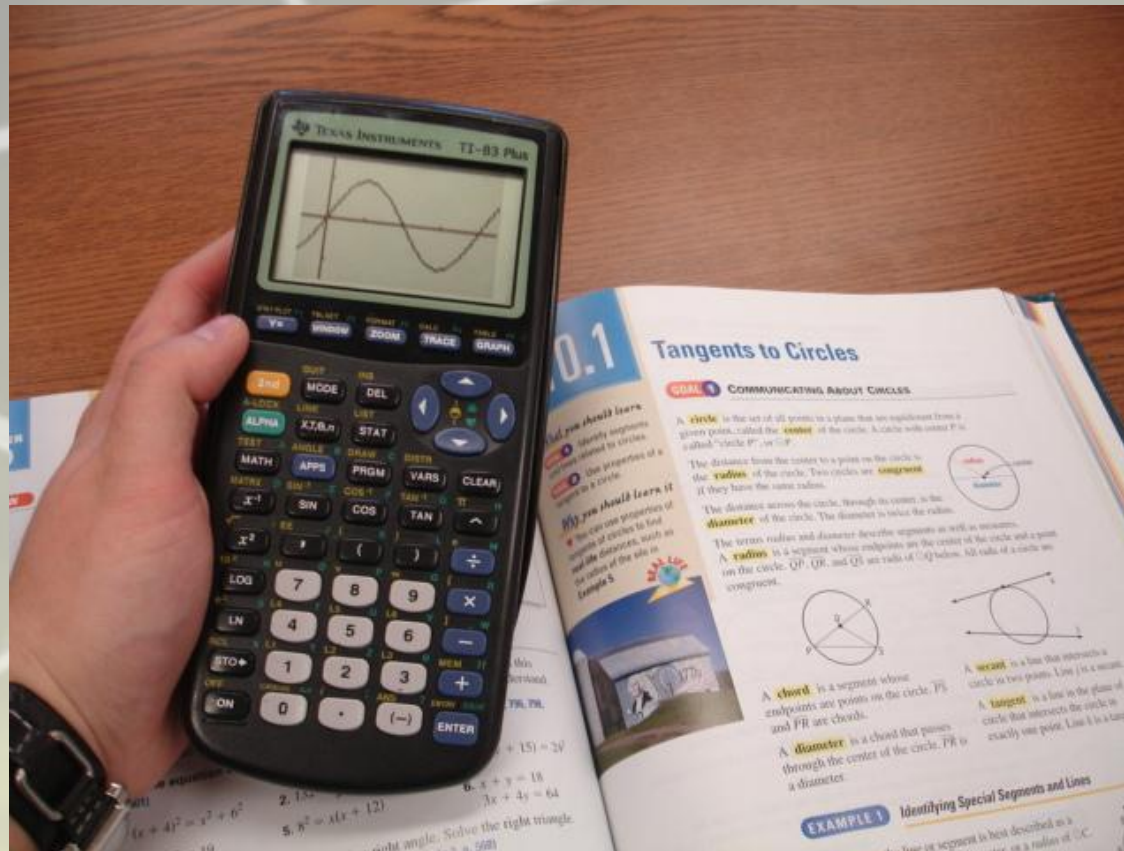
Honors Advanced Algebra

1 Credit/2 Trimesters

Who takes it: Students who are college bound and wish to take Trigonometry or Calculus in high school.

Prerequisite: Honors Geometry

Pre-Calculus



0.1 Tangents to Circles

GOAL 1 COMMUNICATING ABOUT CIRCLES

A **circle** is the set of all points in a plane that are equidistant from a given point, called the **center** of the circle. A circle with center P is called "circle P " or " $\odot P$ ".

The distance from the center to a point on the circle is the **radius** of the circle. Two circles are **congruent** if they have the same radius.

The distance across the circle, through its center, is the **diameter** of the circle. The diameter is twice the radius.

The terms **radius** and **diameter** describe segments as well as measures. A **radius** is a segment whose endpoints are the center of the circle and a point on the circle. \overline{QP} , \overline{DR} , and \overline{QS} are radii of $\odot Q$ below. All radii of a circle are congruent.



A **chord** is a segment whose endpoints are points on the circle. \overline{PS} and \overline{PR} are chords.

A **diameter** is a chord that passes through the center of the circle. \overline{PR} is a diameter.

A **secant** is a line that intersects a circle in two points. Line l is a secant.

A **tangent** is a line in the plane of a circle that intersects the circle in exactly one point. Line k is a tangent.

EXAMPLE 1 Identifying Special Segments and Lines

Line l is a secant. Line k is a tangent. \overline{PS} and \overline{PR} are chords. \overline{PR} is a diameter.

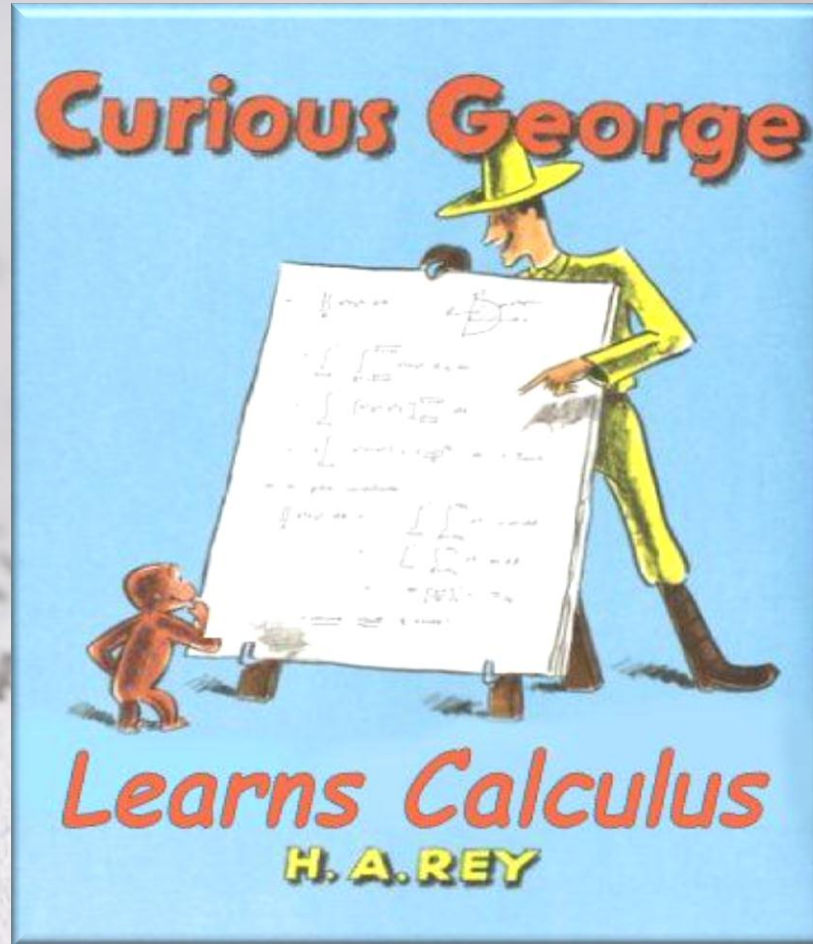
Pre-Calculus

1 Credit/2 Trimesters

Who takes it: Students who want to prepare for Calculus or college level math courses.

Prerequisite: Honors Advanced Algebra

Advanced Placement Calculus



Advanced Placement Calculus AB

1 Credit/2 Trimesters

Who takes it: Students who wish to prepare for math in college and plan to take the AP test in May for college credit.

Prerequisite: Honors Pre-Calculus

Advanced Placement Calculus BC

1 Credit/2 Trimesters

Who takes it: Students who wish to prepare for math in college and plan to take the AP test in May for college credit.

Prerequisite: Calculus AB

Advanced Placement Calculus ABC

1.5 Credits/3 Trimesters

Who takes it: Students wishing to finish Calculus in one year.

Prerequisite: Pre-Calculus
By Teacher Recommendation ONLY

*“For the things of this world
cannot be made known
without a knowledge of
mathematics”*

Roger Bacon
13th Century Scientist

See you in math class!