AHS Learning Guide- Week of May 4, 2020
Math

Algebra 1:
- Students will be able to graph and test solutions to a system of inequalities. Students will be able to model a word problem scenario by graphing a system of inequalities.

Geometry:
- Students will calculate the area of trapezoids, kites & rhombi using the appropriate area formula.
- Students will calculate a missing dimension such as height or base of a trapezoid when given the area and using the area formula.

Algebra 2:
- Students will graph systems of two linear equations in two variables on the coordinate plane and determine the solutions if they exist.
- Students will solve systems of two linear equations with two variables for mathematical and real-world problems.

Math Models:
- Students will solve linear equations in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides.
- Students will solve linear inequalities in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides.

College Prep Math:
- Students will solve multi-step equations.

PreCalculus:
- Learn about limits and how they are used in the realm of Mathematics.

Statistics:

- Students will be able to describe the sampling distribution of sample means for a population mean.

Algebra 1

Objectives

- Students will be able to graph and test solutions to a system of inequalities. Students will be able to model a word problem scenario by graphing a system of inequalities.

For Parents

● **Guide Students through the following activities:**

- **Activity 1 - 4:** If students have not done so already, go to www.khanacademy.org and click on 'Sign Up' in the top right hand corner. They are video lessons with practice problems/quizzes. You can watch the videos as many times as you need.
- If students have already created an account, make sure to login using your school email before beginning the lesson assigned.

Discuss and brainstorm with your student
Revise work as needed
Complete this process for all lesson activities

For Students

- **Activity 1:** ***Evaluating Functions*** Complete all 8 videos and practice assignments for Evaluating Functions.
- **Activity 2:** ***Functions and Equations*** Complete all 3 videos and practice assignments for Functions and Equations.
- **Activity 3:** ***Introduction to Domain and Range of a Function*** Complete all 5 videos and practice assignments for Intro to Domain and Range.
- **Activity 4:** ***Recognizing Functions*** Complete all 7 videos and practice assignments for Recognizing Functions.

Additional Resources

- **www.khanacademy.org**

Geometry

Objectives

- Students will calculate the area of trapezoids, kites & rhombi using the appropriate area formula.
- Students will calculate a missing dimension such as height or base of a trapezoid when given the area and using the area formula.

For Parents

- **Guide Students through the following activities:**

NOTE: There are a few introductional videos for each shape. Please view each one noting the vocabulary we have discussed throughout the year. A copy of completed notes can be found in the additional resources.

NOTE: There is one video for which you can actively follow along by completing the attached notes.

- **Activity 1 Area of Trapezoids -** View the video(s) to review the characteristics of a trapezoid and to learn how to calculate the area of a trapezoid. Please pay close attention to the vocabulary. You will also learn how to use the area of a trapezoid to calculate the missing dimension (height or base). You can actively follow along by completing the attached form of notes (Optional). Complete the attached skills sheet/practice - Area of Trapezoids.
  - A copy of complete notes is attached (see additional resources)

- **Activity 2 Area of Kites & Rhombi -** View the video(s) to review the characteristics of a kite and a rhombus. You will learn how to calculate the area of a kite and a rhombus. Please pay close attention to the vocabulary. You can actively follow along by completing the attached form of notes (Optional). Complete the attached skills sheet/practice - Kites & Rhombi.
  - A copy of complete notes is attached (see additional resources)

- **Activity 3 Google form for Area of Trapezoids, Kites & Rhombi -** Complete the google form - Area of Trapezoids, Kites & Rhombi
  - Note - Don't forget to click "submit".

For Students

- **Activities 1 & 2 - Please pay close attention to the vocabulary, which we have discussed throughout the year. Intro Video Blank Notes**
    - **Intro Video #1 - Trapezoids w/ Examples**
        - **https://youtu.be/IudxEuznlRs**
    - **Intro Video #2 - Kites**
        - **https://youtu.be/-d-8VaNDzhA**
    - **Intro Video #3 - Rhombi**
        - **https://youtu.be/rzfIxKAMWUo**
    - **Videos - Examples of Rhombi & Kites**
        - **https://youtu.be/DfaXYa7xSIM**

    - **Journal Video - Lesson 11.2 - Area of Trapezoids, Kites & Rhombi**
        - **https://youtu.be/huzc5mUQJ4M**
        - **Journal Notes Blank**

        - **Activity 1 WS - Area of Trapezoids**

        - **Activity 2 WS - Kites & Rhombi**

- **Activity 3: Area of Trapezoids, Kites & Rhombi**
    - Google Form

Additional Resources

- **Activities 1 & 2 - Intro Video Notes - Completed**
- **Activities 1 & 2 - Journal Video Notes - Completed**

Algebra 2

Objectives

- Students will graph systems of two linear equations in two variables on the coordinate plane and determine the solutions if they exist.
- Students will solve systems of two linear equations with two variables for mathematical and real-world problems.

For Parents

The resource we have chosen for remote learning opportunities is Shmoop. All Algebra 2 students have a Shmoop account. They will need to log in to their account. Shmoop provides step-by-step lessons and/or videos to instruct students. If your child has forgotten his/her login information, have them contact their teacher via Remind or email. (Teacher emails: Mrs. Hicks- blhicks@angletonisd.net; Mrs. Huff- lhuff@angletonisd.net; Mr. Bacica jbacica@angletonisd.net - check our google classroom)

For Students

- **Activity 1 (Solving Systems by Graphing): https://schools.shmoop.com/basic-algebra/solving-multiple-equations.html**
- **Activity 1 Practice: https://cdn.kutasoftware.com/Worksheets/Alg1/Systems%20of%20Equations%20Graphing.pdf**
- **Activity 2 (Solving Systems Algebraically): https://schools.shmoop.com/basic-algebra/solving-multiple-equations-algebraic.html**
- **Activity 2 Practice: https://cdn.kutasoftware.com/Worksheets/Alg2/Systems%20of%20Two%20Equations.pdf**
- **For extra practice with learning objective 1: https://schools.shmoop.com/math-shack/algebra/solving-systems-of-linear-equations-by-graphing/**
- **For extra practice with learning objective 2:**
    - ❏ **https://schools.shmoop.com/math-shack/algebra/solving-systems-of-linear-equations-by-elimination/**
    - ❏ **https://schools.shmoop.com/math-shack/algebra/solving-systems-of-linear-equations-using-the-addition-method/**

Ways to Modify or Accommodate: **Students will have the ability to rewatch, redo, and retake assignments as many times as needed to master objectives.**

Additional Resources

- **Online Calculator** https://www.desmos.com/
- **Free Download Calculator** *https://education.ti.com/en*
- **YouTube videos over same topics:**
    1) https://youtu.be/NsoCmMtaRPo
    2) https://youtu.be/V7H1oUHXPkg
    3) https://youtu.be/H9PgnVV1i04

Math Models

Objectives

- Students will solve linear equations in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides.
- Students will solve linear inequalities in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides.

For Parents

The resource we have chosen for remote learning opportunities is Shmoop. All Algebra 2 students have a Shmoop account. They will need to log in to their account. Shmoop provides step-by-step lessons and/or videos to instruct students. If your child has forgotten his/her login information, have them contact their teacher via Remind or email. (Teacher emails: Mrs. Hicks- blhicks@angletonisd.net; Mr. Stubblefield - dstubblefield@angletonisd.net check our google classroom)

For Students

- **Activity 1:** https://schools.shmoop.com/equations-inequalities/solving-equations-one-variable.html
- **Activity 1 Practice:** https://cdn.kutasoftware.com/Worksheets/Alg1/Multi-Step%20Equations.pdf
- **Activity 2:** https://schools.shmoop.com/equations-inequalities/solving-inequalities.html
- **Activity 2 Practice:** https://schools.shmoop.com/equations-inequalities/solving-inequalities.html
- **For extra practice with learning objective 1:** https://schools.shmoop.com/math-shack/algebra/solving-linear-equations-with-variables-on-both-sides-of-the-equation/
- **For extra practice with learning objective 2:**

https://schools.shmoop.com/math-shack/algebra/solving-multi-step-inequalities/

Ways to Modify or Accommodate: **Students will have the ability to rewatch, redo, and retake assignments as many times as needed to master objectives.**

Additional Resources

- **Online Calculator** https://www.desmos.com/
- **Free Download Calculator** *https://education.ti.com/en*
- **YouTube videos over same topics:**
    1) https://youtu.be/gSKnEkUMexQ
    2) https://youtu.be/2cQjqAZ8Wmw

College Prep Math

Objectives

- Students will solve multi-step equations.

For Parents

● Guide Students through the following activities:

- **Activity 1: Solving Equations Quizizz**
- **Activity 2: Solving Absolute Value Equations Quizizz**
- **Activity 3: Solving Equations Worksheet**

Discuss and brainstorm with your student
Revise work as needed
Complete this process for all lesson activities

For Students

- **Activity 1: Solving Equations Quizizz**
- **Activity 2: Solving Absolute Value Equations**
- **Activity 3: Solving Equations**

PreCal

Objectives

- Learn about limits and how they are used in the realm of Mathematics.

For Parents

● Guide Students through the following activities:

- **Activity 1 The article the students are asked to read is over the next topic. Article read "Why do we need Limits and Infinitesimals?"**
- **Activity 2 Premade notes and sample assignments are given. Students need to review them**
- **Activity 3 Students should complete the given assignment.**

For Students

- **Activity 1: Read the Article "Why do we Need Limits and Infinitesimals?"**
- **Activity 2: Review the notes and addition practice**
- **Activity 3: Complete the assignment over limits**

Statistics

Objectives

Students will be able to describe the sampling distribution of sample means for a population mean.

For Parents

Discuss and brainstorm with your student
Revise work as needed
Complete this process for all lesson activities

For Students

Activity 1: Central Limit Theorem
Activity 2: Sampling Distribution of the Sampling Mean
Activity 3: Mean, St. Dev, and Shape of Sampling Distributions of Sample Means Questions

Additional Resources

Check the google classroom!