Algebra 2A Summer Packet 2021

NAME:_____TEACHER:_____PERIOD:____

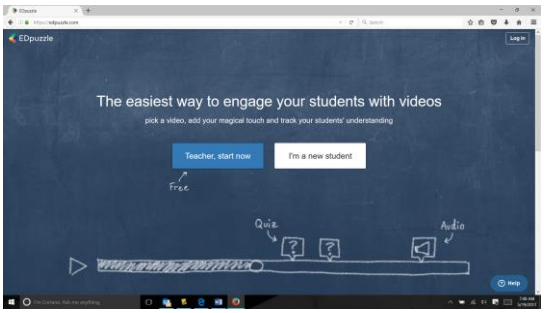
Hello Algebra 2A students,

If you want to review the skills you will need for Algebra 2A, this summer you can watch a series of 5 Edpuzzle videos and complete this packet. For the best benefit, print out this packet, sign in to the Edpuzzle class, watch the videos, complete the notes in the packet as well as the practice problems in the videos. Please follow the directions below to accomplish this task.

Directions

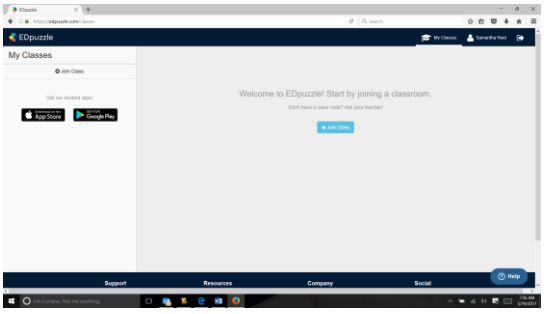
1. Go to **Edpuzzle.com** and click on **I'm a new student** and register for the site using your **FULL FIRST and LAST NAME** or **Log In** if you already have an account. (Please write down your username and password so you do not forget it).

   Username_____
   Password_____



2. Join the Algebra 2A class, enter the code **tuhulji**

   Or go to the link
   https://edpuzzle.com/join/tuhulji



3. Once you have joined the class, you will see 5 video assignments. Click the first one and watch the video. The video will guide you through the summer packet so make sure you have a printed copy ready to fill in. Continue through all 5 videos. You do not need to complete all at one time, Edpuzzle will save your progress.

4. If you have any questions or forget your username/password, please email Mrs.Reid at **sreid@wtps.org**

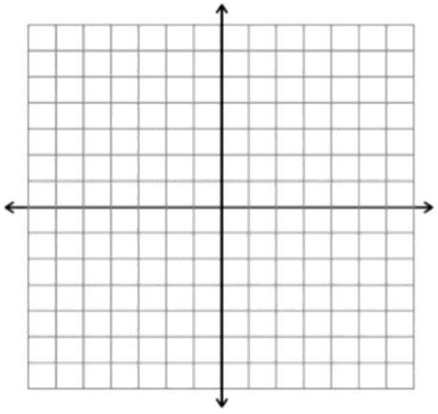
PLEASE NOTE!

To get the most benefit, watch all the videos, copy the notes into this packet, and answer the questions to check your understanding. The questions are not in this packet; they are included within each video. (You will input your answers on the EdPuzzle site throughout each video.)

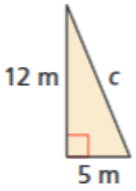
Video 1: Factoring Polynomials

Topic	Definition/Notes	Example
GCF		$6x^2-18x+24$
Easy Trinomial		$x^2-3x-10$
Hard Trinomial		$2x^2+7x+3$
Difference of Squares		x^2-81
Grouping		$3x^3+6x^2+4x+8$
Factoring Completely		$3x^2-3x-36$

Video 2: Linear Functions

Topic	Definition/Notes	Example
Find the slope between two points		Find the slope of the line that passes through the points $(-2,6)$ and $(1,4)$
Slope-Intercept Form		Identify the slope and y-intercept of the equation $y=\frac{2}{3}x+6$
Rewrite into slope-intercept form		Rewrite into slope-intercept form and identify the slope and y-intercept form $4x+3y=-6$
Graphing using slope-intercept		Graph using the slope-intercept form. $y=-2x+5$ 
Write the equation of the line with the given information.		Write the equation of the line that passes through the points $(2,-3)$ and $(4,5)$

Video 3: Radicals

Topic	Definition/Notes	Examples
Simplifying Radicals		Simplify $\sqrt{48}$
Dividing with Radicals		Simplify $\sqrt{\frac{8}{49}}$
Rationalizing the Denominator		Simplify $\frac{2}{\sqrt{5}}$
Pythagorean Theorem		Find the missing side of the right triangle. Leave in simplest radical form. 

Video 4: Properties of Exponents

Topic	Definition/Notes	Example
Product of Powers		Simplify $2x^2y \cdot 4xy^5$
Power to a Power		Simplify $\left(m^4\right)^5$
Product of Powers		Simplify $\left(2x^3y\right)^3$
Quotient of Powers		Simplify $\frac{18x^4y^7}{12x^3y}$
Negative Exponents		Simplify $\frac{4x^{-3}y^5}{m^{-2}}$

Video 5: Solving Equations

Topic	Definition/Notes	Example
2-Step Equations		Solve $2x-4=12$
Multi-Step Equations		Solve $2(x+1)-3x=15$
Variable on Both Sides		Solve $4x-3+x=2x-15$
Equations with Fractions		Solve $\frac{x}{4}-5=9$
Literal Equations		Solve for y. $3x-2y=-8$