**Murray Math - Help Site**

**Getting Started**

Context Policy: Only first names with possibly the first initial of the last name will be used to reference others in my videos.

I have no link to a work policy.

**Planning**

* Topic
  + Math Help Site
* Audience
  + Junior-senior high math students (grades 7-12)
  + This is mainly going to start to be directly useful for my tutoring and former students, but hopefully will grow to their friends and friends of friends.
* Problem
  + Once a student starts getting into pre-algebra, a lot of parents are not able to help their children with their homework. Now the student has to either ask the teacher or find a source that can explain the math concept a different way.
  + I have watched some of these videos and while they make sense to me as a math teacher and a good math student. There’s a lot of times where it is still confusing to the student. I have been told by many students and parents that I present things in a way that makes sense so a video tutorial would be beneficial.
* Author Description
  + This is going to be a video series to provide another way of explaining more difficult math concepts for students to be able to access and use for when homework is difficult, video instruction needs another explanation for the math problem, or parents have no way to help them.
  + I have earned a bachelor's degree in secondary math education and have taught more than 8 years in the classroom, as well as tutoring friends and classmates off and on since I was in high school.
  + Math has always been my favorite subject, and since I was good, I usually got asked by classmates to help them with their homework. My friends said that I could explain how to do the math better than the teacher. So I decided that I could make a career out of this.
* Content Ideas
  + I am going to do a variety of math concepts from pre-algebra, Algebra 1, Algebra 2, geometry, and trigonometry.
  + Some topic suggestions that students have already brought up to me are
    - Solving multi-variable equations: substitution
    - Solving multi-variable equations: elimination
    - unit circle coordinates and degrees
    - radicals: Simplifying
    - Radicals: Rationalizing the denominator
    - synthetic division
    - matrices: multiplication
    - matrices: using Cramer’s Rule
    - Solving quadratic equations
    - Imaginary numbers
    - Solving equations with variables on both sides
    - solving literal equations
    - Factoring polynomials

Popplet mindmap - [app.popplet.com/#/p/7593986](http://app.popplet.com/#/p/7593986)

* Video Production Editor
  + Movavi is going to be my video production editor
  + I will upload these videos to You-tube

**Branding Identity**

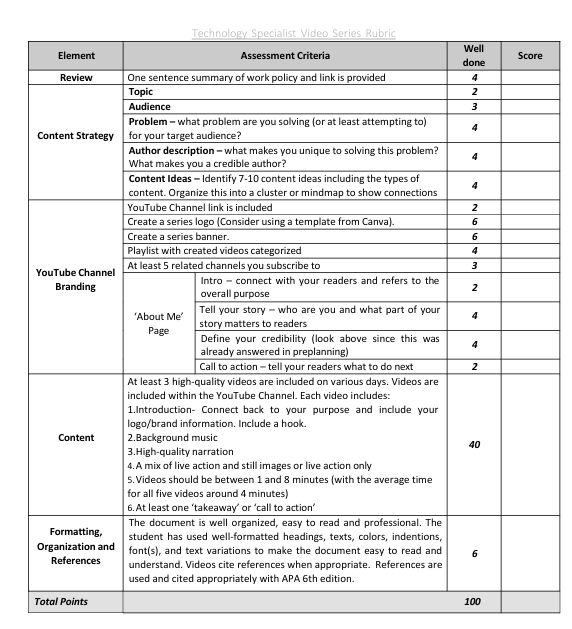
* Youtube Channel Link - <https://www.youtube.com/@murraymath>
* Murray Math - Bringing math to light.
* Logo - <https://www.canva.com/design/DAGAhPmSAco/aEq4I45O2vrPel6Rbj-SAQ/edit?utm_content=DAGAhPmSAco&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton>
* Series Banner - <https://www.canva.com/design/DAGBeJyOePg/ghDzK20c6_3REAmJ2TfemA/edit?utm_content=DAGBeJyOePg&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton>
* Youtube Channel -
  + Playlist
    - Algebra
    - <https://www.youtube.com/@murraymath/playlists>
* Related Channels (5)
  + Mathantics
  + Numberphile
  + The Royal Institution
  + Physics Girl
  + Myth Busters
* About Me Page
  + Intro
    - This video series provides another way of explaining math concepts for students while doing homework and video classes. Some videos can be confusing to students. Many students and parents say that I have a way of presenting that just makes sense. So why not make a channel to show math is fun and share my love of math with others. Hopefully, some will learn to enjoy math too!
  + My Story and Credibility
    - Math has always been my favorite subject, and when I was asked by classmates for homework help, they said that I explained problems better than the teacher. That comment jump started my desire to become a math teacher. I earned a bachelor's degree in math ed. and taught more than 8 years in the classroom, with tutoring off and on since I was in high school.
    - This is a neat way to be able to help more students than just those that I tutor or have taught in my classroom.
  + Call to action
    - Subscribe to my page
    - Send me math problems or topics to discuss for content.

**Creating**

* **Intro Video Script -** [**https://www.youtube.com/watch?v=QUEGP56dQOU&t=16s**](https://www.youtube.com/watch?v=QUEGP56dQOU&t=16s)
  + Welcome to my channel!
  + Why another math tutoring channel?
    - Math has always been my favorite subject, and I want to share my love of math with others.
    - I stepped down from teaching last year to go back to school and get my masters so this allows me to still be able to teach.
    - So I’m trying to help my kids and others with their math homework.
  + Who am I?
    - I’m Robyn Murray.
    - I stepped out of the classroom to get my masters.
    - I have taught math for 8 years and have tutored friends and students since high school.
    - So why not share my love of math with more than just the students in my classroom.
  + What is this channel about?
    - This channel is to help students and maybe even parents understand and be able to work out math problems.
* **Video 1 - Script -** [**https://www.youtube.com/watch?v=UVctfUL4YYk**](https://www.youtube.com/watch?v=UVctfUL4YYk)
  + **Intro -** Welcome to another episode of Murray Math.
  + **Identify Concept**
    - Today we will be solving multi variable equations with substitution.
    - This concept is covered in Algebra 1 and 2.

* + **Work Problem 1**
    - Equation 1 —
    - Equation 2 —
    - Answers (10, 6)
  + **Work Problem 2**
    - Equation 1 —
    - Equation 2 —
    - Answers ( 6, -2)
  + **Work Problem 3 (if time)**
    - Equation 1 —
    - Equation 2 —
    - Answers ( 1, 3)
    - Problems were taken from
      * Parker, G, Ashbaugh, B, McLaughlin, R. (2002). *Algebra 1* (2nd ed.) A Beka Book.
  + **Subscribe and Comment**
* **Video 2 - Script -** [**https://www.youtube.com/watch?v=Cgp81N9i3QY&list=PLhYhE6S1ELIxKLTx8OB4FSCmyqtaVoMTi**](https://www.youtube.com/watch?v=Cgp81N9i3QY&list=PLhYhE6S1ELIxKLTx8OB4FSCmyqtaVoMTi)
  + **Intro -** Welcome to another episode of Murray Math.
  + **Identify Concept**
    - Today we will be simplifying radicals
    - This concept is covered in Algebra 1 and 2.
    - Simplifying radicals is like couples on Valentine’s Day
      * Couples go out as one.
      * Singles stay at home alone.
  + **Work Problem 1**
    - Answer -
  + **Work Problem 2**
    - Answer -
  + **Work Problem 3**
    - Answer -
  + **Work Problem 4**
    - Answer -
  + **Subscribe and Comment**
    - Problems were taken from
      * Parker, G, Ashbaugh, B, McLaughlin, R. (2002). *Algebra 1* (2nd ed.) A Beka Book.
* **Video 3 - Script -** [**https://youtube.com/watch?v=TL0IUZNDPgQ**](https://youtube.com/watch?v=TL0IUZNDPgQ)
  + **Intro -** Welcome to another episode of Murray Math.
  + **Identify Concept**
    - Today we will be working with factoring a difference of squares
    - This concept is covered in Algebra 1 and 2.
    - Difference of squares
      * Are binomials (2 terms)
      * Look for shared greatest common factor (GCF)
      * Factor into conjugates - two sets of parentheses that have the same terms but the signs in the middle are opposites
    - Check answers by using FOIL
  + **Problem 1**
    - No GCF
    - Answer -
  + **Problem 2**
    - GCF -
    - Answer -
  + **Problem 3**
    - GCF - 3
    - Answer -
  + **Problem 4**
    - No GCF
    - Check to see if problem is completely factored
    - Answer -
  + **Subscribe and Comment**

**Rubric on Following Page**

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