

# MATH 311 Homework - Quantifiers

Instructor: Dr. C. Wright

Due: Monday after Spring Break

## Part I: Growth Mindset

Watch the following videos (on YouTube) on the growth mindset:

[https://www.youtube.com/watch?v=\\_X0mg00SpLU](https://www.youtube.com/watch?v=_X0mg00SpLU)

<https://www.youtube.com/watch?v=1IAmoddGfbE>

Respond to the following:

Based on what we have discussed in class and these videos, where do you fall on the spectrum of fixed mindset versus growth mindset (or where do you think you fall)? Are there areas in your life where you have a more fixed mindset, and other areas where you have more of a growth mindset? What lessons would you like to apply to your schoolwork? What lessons would you like to apply to your life? How can you maximize the power of your brain to grow like a muscle?

For more information on the growth mindset, see:

<https://www.mindsetworks.com/Videos>

## Part II: $\mathbb{Z}_n$ Operation Tables

Do these problems in preparation for Monday's lecture when we return.

1. Do the addition modulo  $n$  operation tables for  $\mathbb{Z}_5$ ,  $\mathbb{Z}_6$ ,  $\mathbb{Z}_7$ ,  $\mathbb{Z}_8$ ,  $\mathbb{Z}_9$ .
2. Do the multiplication modulo  $n$  operation tables for  $\mathbb{Z}_5$ ,  $\mathbb{Z}_6$ ,  $\mathbb{Z}_7$ ,  $\mathbb{Z}_8$ ,  $\mathbb{Z}_9$ .