## Warmup 2/(450-200 10 Created by Mr. Lischwe

1) Derman left his home and hiked slowly up a hill. He walked normally across the top, then ran ***MKE SURE YOUR DESK HAS A quickly down the other side.

WHITEBOARD, MARKER, ERASER!***
2) Derman ran to his friend's house. He hung out with his friend for a while, then walked home again.
3) Derman walked to the gas station to buy a candy bar. After he bought it, he saw a ferocious lion. Scared, he ran all the way home.
4) Derman was walking to a birthday party. When he was halfway there, he realized he'd forgotten to bring the present, so he went home to go get it. Once he got the present, he thought he might be late, so he ran all the way to the party.




Time


Time


Time

## PLAN:

- Today: Group Task
- Wednesday: Review Transformations
- Thursday: Transformations Quiz
- Last Unit before Spring Break: Pythagorean Theorem

In reverse:

- rotate $270^{\circ}$ counterclockwise
- then reflect across the $x$-axis
- then translate 5 units up.

A trapezoid was translated 5 units down, then reflected across the x-axis and then rotated $270^{\circ}$ clockwise.


## Check Multiple Transformations Challenge

## For the first 5:

- +1 point for having the correct final location
- +1 more for having the correct letters in the correct spot


## For the last 2:

o +1 point for a solid attempt

- BONUS point for getting them correct
(12 points total)


## Challenge 1



## Challenge 2



## Challenge 3



## Challenge 4



## Challenge 5



## Challenge 6



## Challenge 7

$$
\begin{aligned}
& \text { A ( } 1,-4 \text { ) } \\
& \text { B }(-3,-4) \\
& \text { C }(-3,-2)
\end{aligned}
$$

## Multiple Transformations <br> Challenge

- Do not turn this in. Write your score, out of 12, on the top, next to challenge 1. I will write your score down as I come around.
- This will go back in your binder as page 10.


## Whiteboards!!!

## What sequence of transformations could map shape "A" onto shape "B"? Be specific!



Rotate $90^{\circ} \mathrm{CCW}$, then translate 2 left

## Translation, Reflection, or Rotation (or more than one?)



## Translation, Reflection, or Rotation (or more than one?)



## Reflection

## Translation, Reflection, or Rotation (or more than one?)



Reflection or
Rotation

## Translation, Reflection, or Rotation (or more than one?)



Translation


## Translation, Reflection, or Rotation (or more than one?)



Translation or
Rotation

## Translation, Reflection, or Rotation (or more than one?)

## Reflection or Rotation



## Translation, Reflection, or Rotation (or more than one?)

## Translation,

 Reflection, or Rotation

## Translation, Reflection, or Rotation (or more than one?)

Reflection


## Translation, Reflection, or Rotation (or more than one?)

Rotation


## Group Task: Transform the Square

- We will be in groups of 3 .
- (Read task instructions together)
- Make sure everyone in the group contributes. Even though one person will be writing down your group's answers, the others should contribute just as much!
- You may use whiteboards to help you - just put them back when you're done
- There will be a lot of obvious ones, but try to be creative - I love creative solutions!
- The final position of the letters is an extremely important part of this. This should be discussed and debated in your group. Make sure you get these right!
- It's not a competition, but I'm curious to see how many methods each group can figure out.



## 8 different possible configurations:

- With your group, please label each of your methods with the number of the configuration that matches the image.
- Now try to find a way to get all of the configurations your group didn't get yet.



## Homework

- Worksheet:
- Reverse Transformations
- Finding Sequences of Transformations

