Warmup 2/(74 degrees less than a right angle) Created by Mr. Lischwe

• ***YOU NEED***

- 1 piece of patty paper
- Protractor
- 1. Sketch a graph of what you think the graph of the line **y** = **2** looks like.
- 2. Sketch a graph of what you think the graph of the line **x** = **7** looks like.
- 3. Write the translation notation for a translation 8 units down and 3 units right.

WHEN GRADING HOMEWORK

- You need to actually look at EACH PROBLEM.
 Some of you are grading problems correct that are not actually correct.
- You must use a different color.
- You must write your score at the top.
- I want everyone to take this moment to look at the homework rubric. If you have any questions about how it works, please ask now.





















Rotations Video (2 min)

https://www.youtube.com/watch?v=1sxml4Y1K3s



Using patty paper to perform a rotation

- Look at the triangle at the top of your paper. There is a point below it, called the point of rotation.
- We are going to **ROTATE** the triangle 50 degrees counterclockwise around this central point.
- Pick one of the vertices on your triangle. It can be any vertex. Use your ruler to connect this point to the central point.
- 2. Use your patty paper to trace your triangle **and** this new segment.
- 3. Use your protractor to create a 60° counterclockwise angle, using your segment as one of the sides.
- 4. Turn your patty paper so that the segment rotates from one side of the angle to the other.
- Use your pencil to press really hard into the patty paper at the vertices of your new shape. Then remove the patty paper and connect these three marks to form your rotated triangle!



NOTE: ROTATIONS ARE ALWAYS COUNTERCLOCKWISE UNLESS SPECIFIED OTHERWISE!



Rotations on the Coordinate Plane – WITH Patty Paper

- Draw this trapezoid: T(4, 1); R(4, 5); A(6, 3); P(6, 1). Be sure to label your vertices.
- $\,^\circ\,$ We are going to rotate the trapezoid 90° counterclockwise.
- Use patty paper to trace the trapezoid and the x- and y-axis.
- Turn the patty paper 90° counterclockwise until the x- and yaxis line up again.
- Write down the new coordinates of T', R', A', and P' somewhere.
- Remove the patty paper and draw your new trapezoid using those coordinates.

