Rotate Family Part 1 Names:

Use this worksheet for the first two activities of the Rotate Family lesson.

Warm-Up

What did you notice about moving the basketballs? What did you wonder?

Which player made it easiest to score? Which made it hardest? Why?

Introduction

In the boxes below, describe the relative speed and direction of the variables. Then draw your traces. Include C, θ , x, and $R_{C,\theta}(x)$ in your drawings.

Page 1	Page 2	Page 3
Speed & direction	Speed & direction	Speed & direction
Traces	Traces	Traces
Traces	Traces	Traces

On page 3, could you find a fixed point? Describe your result.

If you set $\theta = 270^{\circ}$ and drag x downward, what direction will $R_{C,\theta}(x)$ move? How did you figure this out?

Rotate Games

On the back of this paper record your group's high scores on each game your teacher assigns.