## Transformation Game

## Student Worksheet

Investigation

## Introduction

This activity, designed to be conducted as a 'whole class' activity, requires the teacher to program TI-Nspire CAS to generate a random graph from a predefined family of curves. Students are then asked to determine the equation of that randomly generated graph. It requires an IWB or data projector so that students may easily view the calculator screen (i.e. via TI-Nspire CAS software). There is a student worksheet in which students can record their answers.

## Game 1

1. $f(x)=\square \sin (\square)+\square$
2. $f(x)=\square \sin (\square x)+\square$
3. $f(x)=\square \sin (\square x)+\square$
4. $f(x)=\square \sin (\square x)+\square$
5. $f(x)=\square \sin (\square x)+\square$

Game 3

1. $f(x)=\square \sin (\square x)+\square$
2. $f(x)=\square \sin (\square x)+\square$
3. $f(x)=\square \sin (\square x)+\square$
4. $f(x)=\square \sin (\square x)+\square$
5. $f(x)=\square \sin (\square x)+\square$

## Game 2

1. $f(x)=\square \sin (\square x)+\square$
2. $f(x)=\square \sin (\square x)+\square$
3. $f(x)=$
$\square$ $\sin (\square x)+$ $\square$
4. $f(x)=$ $\square$ $\sin (\square x)+\square$
5. $f(x)=$ $\square$ $\sin (\square x)+$ $\square$

## Game 4

1. $f(x)=\square \sin (\square x)+\square$
2. $f(x)=\square \sin (\square x)+\square$
3. $f(x)=\square \sin (\square x)+\square$
4. $f(x)=\square \sin (\square x)+\square$
5. $f(x)=\square \sin (\square x)+\square$
$\square$
$\square$
