

Suggested Solutions

Trigonometry: What's My Move

These solutions are suggestions of what an acceptable answer might be. Students will most likely be working in groups, each student can report to other group members and the group could come up with solutions that can be shared with the rest of the class.

Students should have some familiarity with translations of different types of functions.

- 1.1 Students might not know the term *amplitude* at this point. They should be indicating that there has been some sort of stretch or shrink by adding in a value for A that is not 1.
- 1.3
1. Graph I had the vertical translation.
 2. Graph IV had the horizontal translation.
 3. Graph II had the vertical stretch/shrink.
 4. Graph III had the horizontal stretch/shrink.
- 1.7 This is a page where students will move the graph in ways to explore various transformations that can take place. They will see the equation of the function change as they move the graph.
- 1.8 This is also a bit open-ended. Students need to manipulate the graph in order for it to match the requested equation, $y = 2 \cos 3x - 4$. The teacher can change this equation and have students move the function to match the new equation. There are many possibilities using this template.