**Module 3 Performance Task**

As Jake and Arthur traveled together from Detroit to Chicago, each makes a graph relating time and distance. Jake, who lives in Detroit and keeps his watch on Detroit time, graphs his distance from Detroit. Arthur, who lives in Chicago and keeps his watch on Chicago time (1 hour earlier than Detroit), graphs his distance from Chicago. They both use the time shown on their watches for their x-axes. The distance between Detroit and Chicago is 250 miles.

1. If Jakes graph is described by the function , what function describes Arthur’s graph?
2. If Arthur’s graph is described by the function, what function describes Jake’s graph?
3. How are these two graphs related to each other?