**Transforming Functions**

1, Joe the plumber charges $40 for a visit and $15 an hour. Write the function f(x) with x being how many hours he worked.

2. Joe decides that he is going to increase his charge for a visit by $20. Write the function g(x) that shows the increase using the original function. What happened to the graph? What kind of transformation was it?

3. Going back to the original equation, Joe decides to increase his rate per hour by 50% leaving the visiting charge the same. Write h(x) using the original function. What kind of transformation was it?

4. At what point will the g(x) and h(x) be the same?

5. Going back to the original plan, Joe decides to double his hourly rate and decrease his visit cost ro $25. Write the function j(x) using the original function. What kind of transformation was it?