## Quiz 2

Show all your work. Reasonable supporting work must be shown to earn credit. There are two sides to this quiz.

1. ( $\S 1.5 \# 116$ ) Let $f$ be the function that associates the employee number $x$ of each employee of the ABC Corporation with his or her annual salary $f(x)$ in dollars.
(a) [1] Jodi's employee number is 12345 . Interpret what $f(12345)=\$ 40,000$ means in terms of dollars and people.
(b) [3] Suppose the employee making $\$ 25,000$ or more received a $3 \%$ raise, while those making less than $\$ 25,000$ received a $9 \%$ raise. Write a function to describe these new salaries.
2. Consider the graph of $z$ below which is a parabola that has been shifted both vertically and horizontally.
(a) [1] (GraphTransformations \#5) Find the range of $z$.
(b) [1] (WebHW3 \#1)

Find $(z+z)(-1)$

(c) [1] (WebHW3 \#3)

Find $(z \circ z)(-1)$
(d) [3] (Fall2018 TMath120 Quiz2) Find the algebraic rule/expression of $z$

