**Chapter 6 Practice Test**

1. Perform the operation. *(2 points each)*
2. Let *f(t)* and *g(t)* be the market shares of chardonnay and zinfandel wines, respectively, at *t* years since 1990. Reasonable models are:
3. Find an equation of the sum function . *(1 point)*
4. Find . What does it mean in this situation? *(2 points)*
5. Find an equation of the difference function . *(1 point)*
6. Find . What does it mean in this situation? *(2 points)*
7. Write the quadratic function in standard form. *(4 points)*
8. Find the product. *(3 points each)*
   1. d.
   2. e.
9. For and , find an equation of the product function . *(2 points)*
10. Factor. *(3 points each)*
    1. e.
    2. f.
    3. g.
11. Solve. *(4 points each)*
    1. d.

* 1. e.

1. Find the -intercepts of the graph of the function . *(2 points)*
2. A rectangular rug has an area of 54 square feet. If its length is 3 feet less than twice its width, find the dimensions of the rug. *(2 points)*
3. Let be the number of bookmobiles at years since 1998. A reasonable model is
   1. Estimate when there were 878 bookmobiles. *(2 points)*
   2. Predict the total number of bookmobiles in the year 2018. *(1 point)*