

1. Functional forms other than linear and log-log (constant elasticity) can be used in the point expansion method, but useful candidates cannot have more than two parameters.

For example, the function $p = ce^{w/d}$ (or its inverse, $w = d \ln \frac{P}{c}$) is practical.

- a. Applying point expansion, use the elasticity definition given by eq. [2.12] together with this new function to obtain a third demand equation for the situation illustrated in Figure 2.8. That is, compute c and d for the (35000,3) demand point and state the resulting demand function.
- b. Use a software program to graph the three alternative demand functions. Which function exhibits the greatest response to changing water value?