1. An economist estimated that the cost function of a single-product firm is:  
     
   C(*Q*) = 60 + 30*Q* + 25*Q*2 + 5*Q*3.  
     
   Based on this information, determine the following:  
     
   a. The fixed cost of producing 10 units of output.  
     
   $  
     
   b. The variable cost of producing 10 units of output.  
     
   $  
     
   c. The total cost of producing 10 units of output.  
     
   $  
     
   d. The average fixed cost of producing 10 units of output.  
     
   $  
     
   e. The average variable cost of producing 10 units of output.  
     
   $  
     
   f. The average total cost of producing 10 units of output.  
     
   $  
     
   g. The marginal cost when *Q* = 10.