

1. Calculate the elevation of each station of a vertical curve (and find the second differences) where:
 - the station of the PVC is 22+50.00
 - the station of the PVT is 27+50.00
 - the grade from the PVC to the PVI is +6.75%
 - the grade from the PVI to the PVT is +1.00%
 - the elevation of the PVI is 123.96 feet
 - and the distance between stations is 50.00 feet.Also, draw this curve at an appropriate scale.

2. Calculate the elevation of each station of a vertical curve (and find the second differences) where:
 - the length is 900.00 feet
 - the elevation at the PVC is 321.06 feet
 - the elevation at the PVI is 315.66 feet
 - the elevation at the PVT is 300.66 feet
 - the station of the PVC is 42+00.00
 - and the distance between stations is 100.00 feet.Also, draw this curve at an appropriate scale.