

1. Compute half station elevations for the curve and find the point of zero slope:

$$\begin{aligned}G1 &= +2.4\% \\G2 &= -3.4\% \\L &= 1200 \text{ feet} \\PVI \text{ station} &= 76+00 \\PVI \text{ elevation} &= 475.50 \text{ feet}\end{aligned}$$

and the distance between stations is 50.00 feet.

Also, draw this curve at an appropriate scale.

2. Compute full station elevations and the high or low point for the curve where:

$$\begin{aligned}G1 &= +2.14\% \\G2 &= -1.50\% \\L &= 1400 \text{ feet} \\PVI \text{ station} &= 80+00 \\PVI \text{ elevation} &= 1562.50\end{aligned}$$

Also, draw this curve at an appropriate scale.

3. Find the point of zero slope and full station elevations for the curve where:

$$\begin{aligned}G1 &= -3.0\% \\G2 &= +2.7\% \\L &= 1500 \text{ feet} \\PVI \text{ station} &= 166+00 \\PVI \text{ elevation} &= 2565.60\end{aligned}$$

Also, draw this curve at an appropriate scale.