



1. What is the elevation of the midpoint of line AB ?

2345.67 feet
2. If the grade from A to B is -4.567% and the station at A is $4+32.10$, what is the station at B ?

490+90.30
3. What is the horizontal distance in stations from B to the point with elevation 2000.00 on line AB ?

-167.6024 stations
4. If it is exactly 1.5 miles from B to C, what is the percent grade along this line ?

15.574%
5. What is the elevation at the point 5000.00 feet (horizontally) from C on line BC ?

1689.32 feet
6. How far is it in stations from A to C ?

565.7820 stations
7. What zenith angle would be equivalent to -4.567% ?

92°36'54"
8. What is the zenith angle to line BC at B ?

81°08'52"