



Assignment (1)

- List five types of common errors in taping.
- A line AB is measured using a tape of nominal length 20 M and is found to be 65.32 M long. When checked against a standard, the tape was found to be 50 mm too long. Calculate:
 - The correction to the length AB;
 - The correct length AB.
- A distance between two points, measured with a 20 m chain, was recorded as 327 m. it was afterwards found that the chain was 3 cm too long. What was the true distance between the points?
(Answer : 327.49 m)
- A 20 m tape was found after chaining 1200 m to be 6 cm too long. The same tape at the end of the day's work after chaining a total length of 2100 m was found to be 8 cm too long. What is the correct total distance chaining if the tape was correct at the commencement of the work?
- A distance between two points measured with a 20 mt. Tape was recorded as 240 mt. It was afterwards found that tape was 10 cm too long. What was the true distance between the points if the tape was corrected at the commencement of the work?
- The distance between two stations was 1200 m when measured with a 20 m chain. The same distance was measured with a 30 m chain and found to be 1195 m. If the 20 m chain was 0.05 m too long, what was the error in the 30 m chain?
(Answer : +0.20 m)
- A line was measured by a 20 m chain which was accurate before starting the day's work. After chaining 900 m, the chain was found to be 6 cm too long. After chaining a total distance of 1575 m, the chain was found to be 14 cm too long. Find the true distance of the line.

(Answer : 1579.725 m)

- The following slope distances were measured along a chain line with a 20 m steel tape;

slope distance (m)	17.50	19.30	17.80	13.60	12.90
Difference in level	2.35	4.20	2.95	1.65	3.25

It was noted afterwards that the tape was 2.5 cm too short. Find the true horizontal distance.

(Answer : 79.610 m)

- The length of a line measured on a slope of 15° was recorded as 550 m. But it was found that the chain was 0.05 too long. Calculate the true horizontal distance of the line.

(Answer : 532.60 m)