1 Define sine, tangent, negative angle, logarithm, solution of triangle.

2 Indicate the work of finding the length of an arc of 1 degree in a circle whose radius is 8 ft.

3-4 Derive the formulas generally used in solving right triangles, and indicate their application.

5-6 In the oblique triangle ABC, we have given the angle A and the sides a and b; indicate in full the process of finding the remaining parts.

7-8 Derive the formulas used in solving a triangle when its three sides are given.

9 Give in tabular form the algebraic signs of six trigonometric functions of an angle in each of the four quadrants.

10-11 In a right triangle the base is 18 ft and the angle at the base 60°; find the remaining parts.

12-13 Derive an equivalent expression for each of the following: sin 2a, cos 2a, tang 2a, cot 2a.

14-15 Explain how the height of a hill may be determined from measurements made on an adjoining plain. Illustrate by diagram.