



**3055 BA SANGAM COLLEGE**  
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**School: Ba Sangam College**  
**Subject: Technical Drawing**

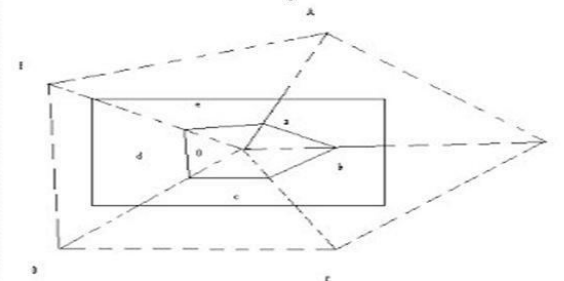
**Year/Level: 11**  
**Worksheet 12**

**Name: \_\_\_\_\_**  
**Year: \_\_\_\_\_**

Strand	Geometrical Drawing
Sub Strand	Surveying
Content Learning Outcome	Know the different methods of surveying

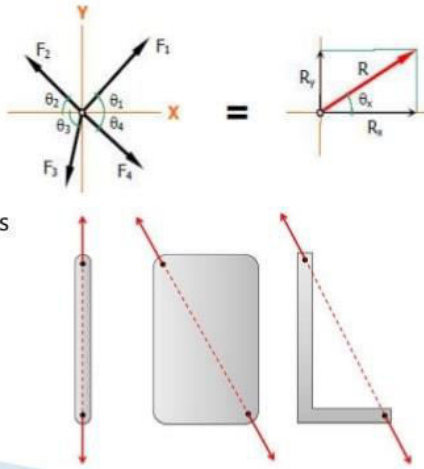
## Method Of Radiation

- In the radiation method of plane table surveying, the direction of the objects or points to be located are obtained by drawing radial lines along fiducial edge of alidade after getting the objects or points bisected along the line of sight of the alidade. The horizontal distances are then measured and scaled off on the corresponding radial lines to mark their positions on the drawing.



## System of Coplanar Forces

- ▶ Coplanar Collinear forces
- ▶ Coplanar Concurrent forces
- ▶ Coplanar Parallel forces
- ▶ Coplanar Non-parallel forces

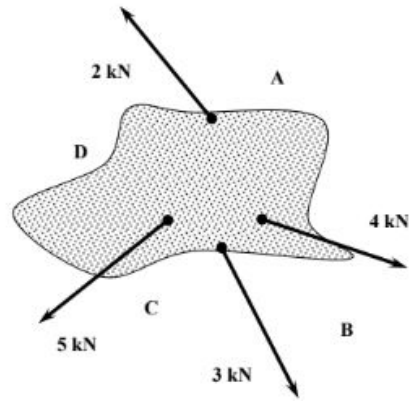


### Activity (15 marks)

**PART A** (8 marks)

**Given:** Space diagram with four coplanar forces ABCD acting on a plane.

**Required:** Determine graphically the magnitude and the location of the resultant force. Use the scale as 10 mm = 1 kN. Use the starting point A given below.



BQ4A			
1	Correct Bows Notation	1	
2	Correct force diagram	2	
3	Correct location of resultant force	2	
4	Correct magnitude of resultant force	2	
5	Correct line work	1	

**Given:**  
 (a) Starting point A.  
 (b) Direction of North.  
 (c) Rice farm to a scale of 1:1000



**Required**  
 (i) Name the method to be used: \_\_\_\_\_ (1 mark)  
 (ii) Complete the **FIELD BOOK** given below. (6 marks)

**FIELD BOOK**

PEG	DISTANCE (m)	FORWARD BEARING (°)	BACKWARD BEARING (°)
OA			
OB			
OC			
OD			

