3055 BA SANGAM COLLEGE

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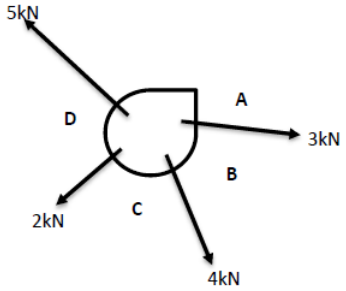
School: Ba Sangam College **Year/Level: 11** **Name: _____**

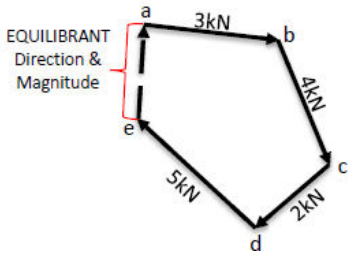
Subject: Technical Drawing **Worksheet 10** **Year: _____**

Strand	Geometrical Drawing
Sub Strand	Forces
Content Learning Outcome	Define and solve vectors

STEP 1
Label the spaces between the forces as shown using bow's notation



STEP 2
Construct a vector polygon (diagram) using the known forces to a suitable scale and close the polygon. This will be the equilibrant (F_5) giving its magnitude and direction.



STEP 3

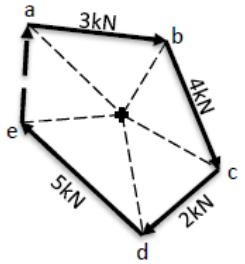
Label the points of the vector diagram by small letters *a, b, c, d, e*. Thus, this vector *ab* will represent force F_1 (3kN) which is lying between AB.

STEP 4

Select a suitable point *o* in the middle of the vector polygon (diagram)

STEP 5

Join *abcde* to the point *o*.



Question (10 marks)

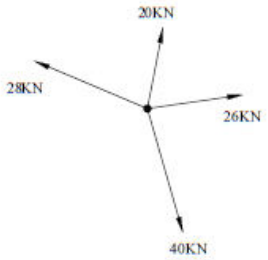
CON CURRENT CO PLANER FORCES

GIVEN: A system of concurrent forces acting on the same plane

REQUIRED: 1. Find the magnitude and direction of the equilibrant force

2. Locate the position of the equilibrant force on the given space diagram

NOTE: Use the given starting point to locate the first vector.



SCALE 2mm : 1KN