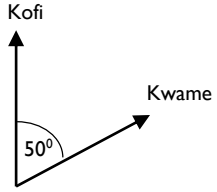
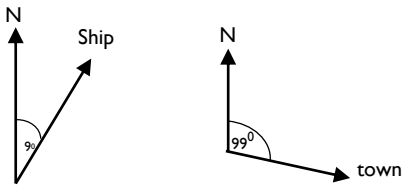
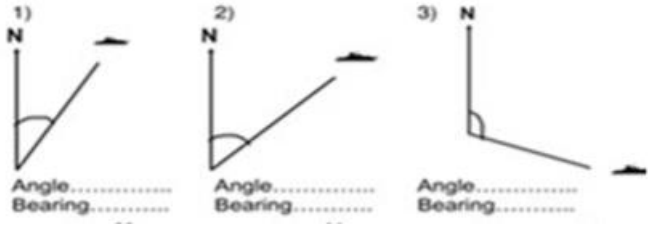
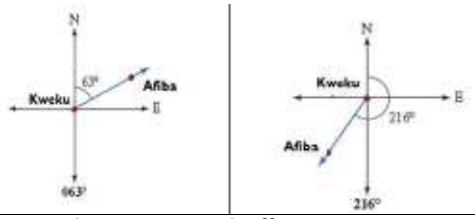
TERM THREE
WEEKLY LESSON NOTES
WEEK 5

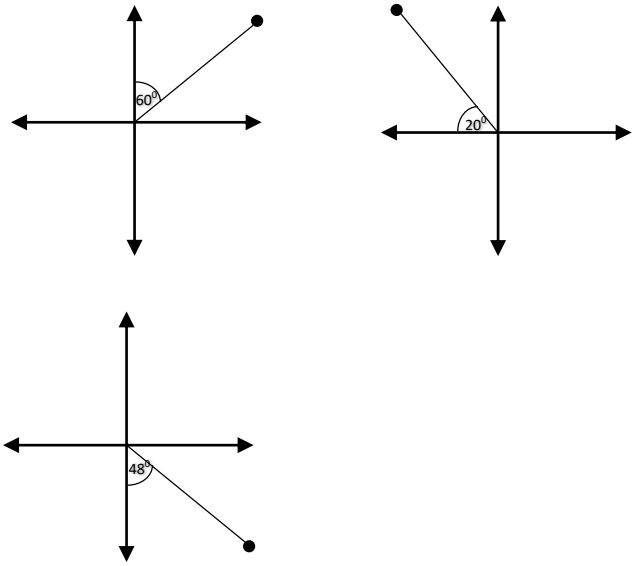
Week Ending: 14th OCT, 2022	**DAY:**	**Subject:** Mathematics	
Duration: 60MINS		**Strand:** Geometry & Measurement	
Class: B7	**Class Size:**	**Sub Strand:** Bearing	
Content Standard: B7.3.2.3 Demonstrate understanding of bearings, vector and its components using real life cases	**Indicator:** B7.3.2.3.1 Describe the bearing of a point from another point		**Lesson:** 1 of 2
Performance Indicator: Learners can describe the bearing of a point from another point		**Core Competencies:** Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
References: Mathematics Curriculum Pg. 58			

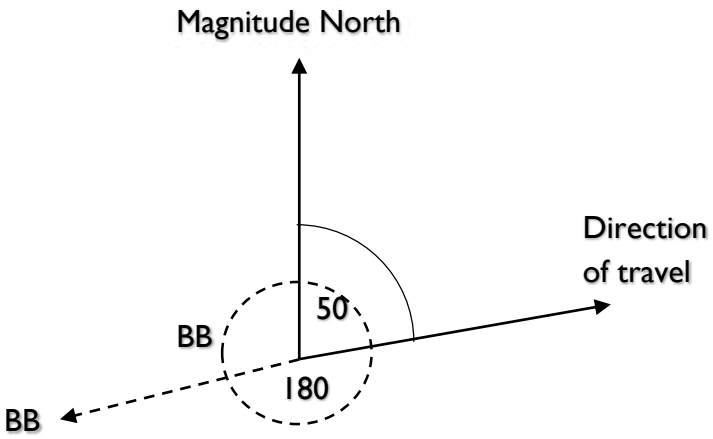
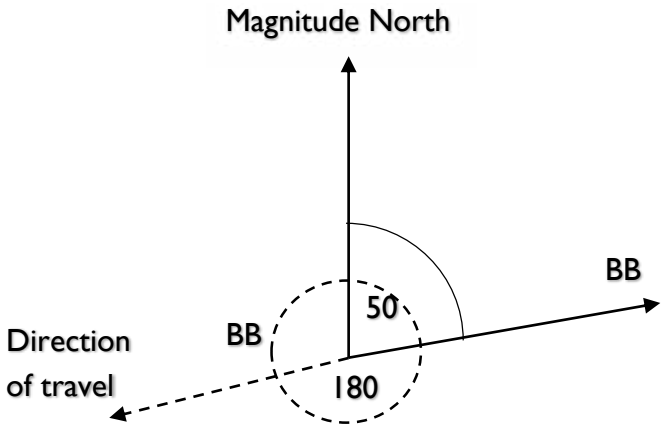
Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Share performance indicators and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Start the lesson by calling learners to give direction to places in the community making reference to the cardinal points. That is North, South, East and West. Brainstorm learners for the meaning of Bearing. Bearings give directions in terms of an angle. Call 2 students to the front of the class, placing them far apart. Ask learners to talk about the distance between the students in terms of angle. Write on the board Kofi 50^0 Kwame. Guide learners to read it as "from Kofi measures 50 towards Kwame" Guide learners to draw a diagram to explain that.  Introduce learners to the three figure bearings. Draw the diagrams and guide learners to use the three figure bearing to describe them.	

	 In the first diagram, 9^0 gives 009^0 and 99^0 gives a bearing 099^0. Guide learners to use protractor to find the marked angles. For each diagram write the three-digit bearing.  Learners recognize true bearings as the angle measured in the clockwise direction from the North. Guide learners to express the following vectors graphically and measure each angle. (i) $\overrightarrow{PQ}=\begin{pmatrix}-3\\4\end{pmatrix}$ (ii) $\overrightarrow{BC}=\begin{pmatrix}2\\3\end{pmatrix}$ In pairs learners draw the following vectors and measure each angle. (i) $\overrightarrow{AB}$=(3km,060) (ii) $\overrightarrow{QR}$=(5km,120) <u>Assessment</u> State the bearing of the point kweku in each of the diagram. 	
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson.	

Week Ending: 14th OCT, 2022	**DAY:**	**Subject:** Mathematics
Duration: 60MINS		**Strand:** Geometry & Measurement
Class: B7	**Class Size:**	**Sub Strand:** Back Bearing

Content Standard: B7.3.2.3 Demonstrate understanding of bearings, vector and its components using real life cases	**Indicator:** B7.3.2.3.2 Explain how to find the back bearing when the direction of travel has a bearing which is less than 180° and/ or greater than 180°	**Lesson:** 2 of 2
Performance Indicator: Learners can find the Back Bearing when the direction is either greater or less than 180.	**Core Competencies:** Communication and Collaboration (CC) Critical Thinking and Problem solving (CP)	
References: Mathematics Curriculum Pg. 58		

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Share performance indicators and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Draw these diagrams on the and ask learners in groups to solve them. Call groups to present their answers on the board.  Introduce learners to the back bearing. Explain to learners that bearings are useful if you are heading out to someplace and then returning along the same line of travel. 1. When the direction of travel bearing is less than 180 degrees. Example your bearing is 50, then your back bearing is 230. Back bearing = (180 + direction of travel bearing) BB = (180 + 50) = 230	

	 Back bearing = (180 + bearing) 2. When the direction of travel bearing is greater than 180. For example if your bearing is 230, then your back bearing is 50 degrees. BB = B -180 BB = 230 – 180 = 50  In pairs, learners solve these examples • If the bearing of Y from X is 060, find the bearing of X from Y. • If the bearing of P from Q is 245, find the bearing of Q from P. <u>Assessment</u> • If the bearing of a point Q from another point P is 040, find the bearing of P from Q. • If the baring of P from Q is 145, find the baring of Q from P.	
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson.	Graph sheet, Protractor, Ruler