**MATHEMATICS SCHEMES OF WORK FORM 4**

**TERM 2**

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| **WK** | **LSN** | **TOPIC** | **SUB-TOPIC** | **OBJECTIVES** | **T/L ACTIVITIES** | **T/L AIDS** | **REFERENCE** | **REM** |
| 1 | 1 | Trigonometry | Deriving the relation Sin2 0 + Cos2 0 = 1 | By the end of the lesson, the learner should be able to:    Derive trigonometric identity Sin2 0 + Cos2 0 = 1 | Practice exercise Advancing BK 4, Ex. 4.1 Ex 4.2, Ex 4.3 | Charts illustrating the unit circle and right | - K.M, Advancing in Math F4 Pg 59-64 |  |
| 2 | Trigonometry | Trigonometric ratios of the form y = sin x y = tan x y = cos x | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric ratios of the form y = sin x y = tan x y = cos x | Practice exercise KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.4 and 4.5 Patel BK 4, Ex. 4.2 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-64 - KLB Bk4 Pg 96-99 |  |
| 3 | Trigonometry | Trigonometric ratios of the form y = sin x y = tan x y = cos x | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric ratios of the form y = sin x y = tan x y = cos x | Practice exercise KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.4 and 4.5 Patel BK 4, Ex. 4.2 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-64 - KLB Bk4 Pg 96-99 |  |
| 4 | Trigonometry | Trigonometric ratios of the form y = sin x y = tan x y = cos x | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric ratios of the form y = sin x y = tan x y = cos x | Practice exercise KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.4 and 4.5 Patel BK 4, Ex. 4.2 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-64 - KLB Bk4 Pg 96-99 |  |
| 5 | Trigonometry | Graphs of Trigonometric relations y = a sin x y = a cos x y = a tan x | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric relations y = sin x y = cos x  y = tan x | Drawing graphs  KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.4 Patel BK 4, Ex. 4.3 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-63 - KLB Bk4 Pg 96-99 |  |
| 6 | Trigonometry | Graphs of Trigonometric relations y = a sin x y = a cos x y = a tan x | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric relations y = sin x y = cos x  y = tan x | Drawing graphs  KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.4 Patel BK 4, Ex. 4.3 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-63 - KLB Bk4 Pg 96-99 |  |
| 7 | Trigonometry | Graphs of Trigonometric relations y = a sin x y = a cos x y = a tan x | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric relations y = sin x y = cos x  y = tan x | Drawing graphs  KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.4 Patel BK 4, Ex. 4.3 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-63 - KLB Bk4 Pg 96-99 |  |
| 2 | 1 | Trigonometry | Simple trigonometric equations, amplitudes, period, wavelength and phase angle of trigonometric function | By the end of the lesson, the learner should be able to:    Deduce from the graphs y = sin x y = tan x y = cos x The amplitude, wavelength and phase angle | Practice exercise | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 59-63 |  |
| 2 | Trigonometry | Simple trigonometric equations, amplitudes, period, wavelength and phase angle of trigonometric function | By the end of the lesson, the learner should be able to:    Deduce from the graphs y = sin x y = tan x y = cos x The amplitude, wavelength and phase angle | Practice exercise | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 59-63 |  |
| 3 | Trigonometry | Simple trigonometric equations, amplitudes, period, wavelength and phase angle of trigonometric function | By the end of the lesson, the learner should be able to:    Deduce from the graphs y = sin x y = tan x y = cos x The amplitude, wavelength and phase angle | Practice exercise | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 59-63 |  |
| 4 | Trigonometry | Trigonometry y = a sin (bx + 0) | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric ratios of  the form y = a sin (bx + 0) | Drawing graphs | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 60 |  |
| 5 | Trigonometry | Trigonometry y = a cos (bx + 0) y = a tan (bx + 0) | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric ratios of the form y = a cos (bx + 0) y = a tan (bx + 0) | Drawing graphs | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-64 |  |
| 6 | Trigonometry | Trigonometry y = a cos (bx + 0) y = a tan (bx + 0) | By the end of the lesson, the learner should be able to:    Draw graphs of trigonometric ratios of the form y = a cos (bx + 0) y = a tan (bx + 0) | Drawing graphs | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 59-64 |  |
| 7 | Trigonometry | Amplitude, period, wavelength and phase Phase angles of trigonometric function | By the end of the lesson, the learner should be able to:    Deduce the graphs y = a sin (bx + 0) y = a cos (bx + 0) y = a tan (bx + 0) | Practice exercise | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 59-64 |  |
| 3 | 1 | Trigonometry | Solution to simple Trigonometric equations | By the end of the lesson, the learner should be able to:    Solve simple trigonometric equations analytically and graphically | Practice exercise KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.6 Patel BK 4, Ex. 4.4 | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 65-67 - KLB BK 4  Pg 100-102 |  |
| 2 | Trigonometry | Solution to simple Trigonometric equations | By the end of the lesson, the learner should be able to:    Solve simple trigonometric equations analytically and graphically | Practice exercise KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.6 Patel BK 4, Ex. 4.4 | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 65-67 - KLB BK 4  Pg 100-102 |  |
| 3 | Trigonometry | Solution to simple Trigonometric equations | By the end of the lesson, the learner should be able to:    Solve simple trigonometric equations analytically and graphically | Practice exercise KLB Pg 4, Ex. 4.3 Advancing BK 4,  Ex. 4.6 Patel BK 4, Ex. 4.4 | Trigonometric relations Graphs | - K.M, Advancing in Math F4 Pg 65-67 - KLB BK 4  Pg 100-102 |  |
| 4 | Three Dimensional Geometry | Geometrical properties of common solids | By the end of the lesson, the learner should be able to:    State the geometric properties of  common solids ? Education Plus Agencies | Practice exercise Advancing BK 4,  Ex. 5.1 KLB Pg 4, Ex. 5.1 | 3-D models | - K.M, Advancing in Math F4 Pg 72-73 - KLB BK 4  Pg 104-106 |  |
| 5 | Three Dimensional Geometry | Geometrical properties of common solids | By the end of the lesson, the learner should be able to:    State the geometric properties of  common solids ? Education Plus Agencies | Practice exercise Advancing BK 4,  Ex. 5.1 KLB Pg 4, Ex. 5.1 | 3-D models | - K.M, Advancing in Math F4 Pg 72-73 - KLB BK 4  Pg 104-106 |  |
| 6 | Three Dimensional Geometry | Skew lines projection of a line onto a plane | By the end of the lesson, the learner should be able to:    Identify projection of a line onto a  Plane | Practice exercise Advancing BK 4,  Ex. 5.1 KLB Pg 4, Ex. 5.2 | 3-D models | - K.M, Advancing in Math F4 Pg 73 - KLB BK 4  Pg 118-119 |  |
| 7 | Three Dimensional Geometry | Length of a line in 3D geometry | By the end of the lesson, the learner should be able to:    Calculate the length between two points in 3D geometry | Practice exercise Advancing BK 4,  Ex. 5.4 | 3-D models | - K.M, Advancing in Math F4 Pg 78-80 |  |
| 4 | 1 | Three Dimensional Geometry | Angle between a line and a line | By the end of the lesson, the learner should be able to:    Identify and calculate the angle between a line and a line | Practice exercise Advancing BK 4,  Ex. 5.4 | 3-D models | - K.M, Advancing in Math F4 Pg 77-80 |  |
| 2 | Three Dimensional Geometry | Angle between a line and a line | By the end of the lesson, the learner should be able to:    Identify and calculate the angle between a line and a line | Practice exercise Advancing BK 4,  Ex. 5.4 | 3-D models | - K.M, Advancing in Math F4 Pg 77-80 |  |
| 3 | Three Dimensional Geometry | A line and a plane | By the end of the lesson, the learner should be able to:    Identify and calculate the angle between a line and a plane | Practice exercise Advancing BK 4,  Ex. 5.3 and 5.4 KLB Pg 4, Ex. 5.1 | 3-D models | - K.M, Advancing in Math F4 Pg 78-80 - KLB BK 4  Pg 106-109 |  |
| 4 | Three Dimensional Geometry | A plane and a plane | By the end of the lesson, the learner should be able to:    Identify and calculate the angle between a line and a plane | Practice exercise Advancing BK 4,  Ex. 5.4 KLB Pg 4, Ex. 5.2 | 3-D models | - K.M, Advancing in Math F4 Pg 78-80 - KLB BK 4  Pg 113-118 |  |
| 5 | Three Dimensional Geometry | A plane and a plane | By the end of the lesson, the learner should be able to:    Identify and calculate the angle between a line and a plane | Practice exercise Advancing BK 4,  Ex. 5.4 KLB Pg 4, Ex. 5.2 | 3-D models | - K.M, Advancing in Math F4 Pg 78-80 - KLB BK 4  Pg 113-118 |  |
| 6 | Three Dimensional Geometry | Angles between skew lines | By the end of the lesson, the learner should be able to:    Identify and calculate the angle  between skew lines | Practice exercise Advancing BK 4,  Ex. 5.4 KLB Pg 4, Ex. 5.2 | 3-D models | - K.M, Advancing in Math F4 Pg 78-80 - KLB BK 4  Pg 118-119 |  |
| 7 | Longitudes and Latitudes | Latitudes and longitudes (great and small circle) | By the end of the lesson, the learner should be able to:    Define the great and small circle in  relation to a sphere (including the earth) | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 81-83 - KLB BK 4  Pg 125-126 |  |
| 5 | 1 | Longitudes and Latitudes | The equator and Greenwich meridian | By the end of the lesson, the learner should be able to:    Define the great and small circle in relation to a sphere (including the earth) | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 83 - KLB BK 4  Pg 126-127 |  |
| 2 | Longitudes and Latitudes | The equator and Greenwich meridian | By the end of the lesson, the learner should be able to:    Define the great and small circle in relation to a sphere (including the earth) | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 83 - KLB BK 4  Pg 126-127 |  |
| 3 | Longitudes and Latitudes | The equator and Greenwich meridian | By the end of the lesson, the learner should be able to:    Define the great and small circle in relation to a sphere (including the earth) | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 83 - KLB BK 4  Pg 126-127 |  |
| 4 | Longitudes and Latitudes | The equator and Greenwich meridian | By the end of the lesson, the learner should be able to:    Define the great and small circle in relation to a sphere (including the earth) | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 83 - KLB BK 4  Pg 126-127 |  |
| 5 | Longitudes and Latitudes | The equator and Greenwich meridian | By the end of the lesson, the learner should be able to:    Define the great and small circle in relation to a sphere (including the earth) | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 83 - KLB BK 4  Pg 126-127 |  |
| 6 | Longitudes and Latitudes | Longitudes and Latitudes Position of a place on the surface of the earth | By the end of the lesson, the learner should be able to:    Locate a place on the earth?s surface in terms of latitude and longitude | Practice exercise Advancing BK 4,  Ex. 6.2 KLB Pg 4, Ex. 6.1 | Globe Ball | - K.M, Advancing in Math F4 Pg 86 - KLB BK 4  Pg 128-129 |  |
| 7 | Longitudes and Latitudes | Radii of small and great circles | By the end of the lesson, the learner should be able to:    Establish the relationship between the radii of small and great circles | Practice exercise Advancing BK 4,  Ex. 6.4 KLB Pg 4, Ex. 6.2 | Globe Ball | - K.M, Advancing in Math F4 Pg 89 - KLB BK 4  Pg 133-134 |  |
| 6 | 1 | Longitudes and Latitudes | Distance between two points along the small and great circle in nautical miles and kilometres | By the end of the lesson, the learner should be able to:    Calculate the distance between two points along the great circles and small circles (longitudes and latitudes) in nautical miles (nm) and kilometres (km) | Practice exercise Advancing BK 4,  Ex. 6.4 KLB Pg 4, Ex. 6.2 | Globe Ball | - K.M, Advancing in Math F4 Pg 87-90 - KLB BK 4  Pg 130-139 |  |
| 2 | Longitudes and Latitudes | Distance between two points along the small and great circle in nautical miles and kilometres | By the end of the lesson, the learner should be able to:    Calculate the distance between two points along the great circles and small circles (longitudes and latitudes) in nautical miles (nm) and kilometres (km) | Practice exercise Advancing BK 4,  Ex. 6.4 KLB Pg 4, Ex. 6.2 | Globe Ball | - K.M, Advancing in Math F4 Pg 87-90 - KLB BK 4  Pg 130-139 |  |
| 3 | Longitudes and Latitudes | Distance in nautical miles and kilometers along a circle of latitude | By the end of the lesson, the learner should be able to:    Calculate the distance in nautical miles and kilometers along a circle of  latitude | Practice exercise Advancing BK 4,  Ex. 6.5 KLB Pg 4, Ex. 6.3 | Globe Ball  Calculators | - K.M, Advancing in Math F4 Pg 87-98 - KLB BK 4  Pg 130-133 |  |
| 4 | Longitudes and Latitudes | Distance in nautical miles and kilometers along a circle of latitude | By the end of the lesson, the learner should be able to:    Calculate the distance in nautical miles and kilometers along a circle of  latitude | Practice exercise Advancing BK 4,  Ex. 6.5 KLB Pg 4, Ex. 6.3 | Globe Ball  Calculators | - K.M, Advancing in Math F4 Pg 87-98 - KLB BK 4  Pg 130-133 |  |
| 5 | Longitudes and Latitudes | Distance in nautical miles and kilometers along a circle of latitude | By the end of the lesson, the learner should be able to:    Calculate the distance in nautical miles and kilometers along a circle of  latitude | Practice exercise Advancing BK 4,  Ex. 6.5 KLB Pg 4, Ex. 6.3 | Globe Ball  Calculators | - K.M, Advancing in Math F4 Pg 87-98 - KLB BK 4  Pg 130-133 |  |
| 6 | Longitudes and Latitudes | Time and longitude | By the end of the lesson, the learner should be able to:    Calculate time in relation to kilometers per hour | Practice exercise Advancing BK 4,  Ex. 6.5 KLB Pg 4, Ex. 6.3 | Globe Ball  Calculators | - K.M, Advancing in Math F4 Pg 91-92 - KLB Bk4Pg141-142 |  |
| 7 | Longitudes and Latitudes | Time and longitude | By the end of the lesson, the learner should be able to:    Calculate time in relation to kilometers per hour | Practice exercise Advancing BK 4,  Ex. 6.5 KLB Pg 4, Ex. 6.3 | Globe Ball  Calculators | - K.M, Advancing in Math F4 Pg 91-92 - KLB Bk4Pg141-142 |  |
| 7 | 1 | Longitudes and Latitudes | Speed in knots and kilometer per hour | By the end of the lesson, the learner should be able to:    Calculate speed in knots and kilometer per hour | Practice exercise Advancing BK 4,  Ex. 6.6 KLB Pg 4, Ex. 6.3 | Real life situation | - K.M, Advancing in Math F4 Pg 96-98 - KLB BK 4 Pg 150 |  |
| 2 | Longitudes and Latitudes | Speed in knots and kilometer per hour | By the end of the lesson, the learner should be able to:    Calculate speed in knots and kilometer per hour | Practice exercise Advancing BK 4,  Ex. 6.6 KLB Pg 4, Ex. 6.3 | Real life situation | - K.M, Advancing in Math F4 Pg 96-98 - KLB BK 4 Pg 150 |  |
| 3 | Longitudes and Latitudes | Speed in knots and kilometer per hour | By the end of the lesson, the learner should be able to:    Calculate speed in knots and kilometer per hour | Practice exercise Advancing BK 4,  Ex. 6.6 KLB Pg 4, Ex. 6.3 | Real life situation | - K.M, Advancing in Math F4 Pg 96-98 - KLB BK 4 Pg 150 |  |
| 4 | Longitudes and Latitudes | Speed in knots and kilometer per hour | By the end of the lesson, the learner should be able to:    Calculate speed in knots and kilometer per hour | Practice exercise Advancing BK 4,  Ex. 6.6 KLB Pg 4, Ex. 6.3 | Real life situation | - K.M, Advancing in Math F4 Pg 96-98 - KLB BK 4 Pg 150 |  |
| 5 | Linear Programming | Formation of linear Inequalities | By the end of the lesson, the learner should be able to:    Form linear inequalities based on real life situations | Practice exercise Advancing BK 4,  Ex. 7.3 KLB BK 4, Ex. 7.1 | Inequalities | - K.M, Advancing in Math F4 Pg 94-95 - KLB BK 4  Pg 151-152 |  |
| 6 | Linear Programming | Formation of linear Inequalities | By the end of the lesson, the learner should be able to:    Form linear inequalities based on real life situations | Practice exercise Advancing BK 4,  Ex. 7.3 KLB BK 4, Ex. 7.1 | Inequalities | - K.M, Advancing in Math F4 Pg 94-95 - KLB BK 4  Pg 151-152 |  |
| 7 | Linear Programming | Formation of linear Inequalities | By the end of the lesson, the learner should be able to:    Form linear inequalities based on real life situations | Practice exercise Advancing BK 4,  Ex. 7.3 KLB BK 4, Ex. 7.1 | Inequalities | - K.M, Advancing in Math F4 Pg 94-95 - KLB BK 4  Pg 151-152 |  |
| 8 | **Mid Term Break** | | | | | | | |
| 9 | 1 | Linear Programming | Analytical solutions of linear inequalities | By the end of the lesson, the learner should be able to:    Analyze solutions of linear inequalities | Practice exercise Advancing BK 4,  Ex. 7.1 KLB BK 4, Ex. 7.2 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 95-96 - KLB BK 4  Pg 152-155 |  |
| 2 | Linear Programming | Analytical solutions of linear inequalities | By the end of the lesson, the learner should be able to:    Analyze solutions of linear inequalities | Practice exercise Advancing BK 4,  Ex. 7.1 KLB BK 4, Ex. 7.2 | Square boards Graph papers | - K.M, Advancing in Math F4 Pg 95-96 - KLB BK 4  Pg 152-155 |  |
| 3 | Linear Programming | Solutions of linear inequalities by graph | By the end of the lesson, the learner should be able to:    Represent the linear inequalities on a graph | Representing inequalities in a graph Advancing BK 4,  Ex. 7.2 KLB BK 4, Ex. 7.2 | Square boards | - K.M, Advancing in Math F4 Pg 94-95 - KLB BK 4  Pg 151-152 |  |
| 4 | Linear Programming | Solutions of linear inequalities by graph | By the end of the lesson, the learner should be able to:    Represent the linear inequalities on a graph | Representing inequalities in a graph Advancing BK 4,  Ex. 7.2 KLB BK 4, Ex. 7.2 | Square boards | - K.M, Advancing in Math F4 Pg 94-95 - KLB BK 4  Pg 151-152 |  |
| 5 | Linear Programming | Solutions of linear inequalities by graph | By the end of the lesson, the learner should be able to:    Represent the linear inequalities on a graph | Representing inequalities in a graph Advancing BK 4,  Ex. 7.2 KLB BK 4, Ex. 7.2 | Square boards | - K.M, Advancing in Math F4 Pg 94-95 - KLB BK 4  Pg 151-152 |  |
| 6 | Linear Programming | Optimization (include objective) | By the end of the lesson, the learner should be able to:    Solve and interpret the optimum  solution of the linear inequalities | Practice exercise Advancing BK 4,  Ex. 7.5 KLB BK 4, Ex. 7.3 | Graph paper | - K.M, Advancing in Math F4 Pg 95-96 - KLB BK 4  Pg 152-155 |  |
| 7 | Linear Programming | Optimization (include objective) | By the end of the lesson, the learner should be able to:    Solve and interpret the optimum  solution of the linear inequalities | Practice exercise Advancing BK 4,  Ex. 7.5 KLB BK 4, Ex. 7.3 | Graph paper | - K.M, Advancing in Math F4 Pg 95-96 - KLB BK 4  Pg 152-155 |  |
| 10 | 1 | Linear Programming | Application of linear programming to real life situation | By the end of the lesson, the learner should be able to:    Solve and interpret the optimum  solution of the linear programming to real life situations | Practice exercise Advancing BK 4,  Ex. 7.5 KLB BK 4, Ex. 7.3 | Real life situations Square boards Graph paper | - K.M, Advancing in Math F4 Pg 99-100 - KLB BK 4  Pg 157-159 |  |
| 2 | Linear Programming | Application of linear programming to real life situation | By the end of the lesson, the learner should be able to:    Solve and interpret the optimum  solution of the linear programming to real life situations | Practice exercise Advancing BK 4,  Ex. 7.5 KLB BK 4, Ex. 7.3 | Real life situations Square boards Graph paper | - K.M, Advancing in Math F4 Pg 99-100 - KLB BK 4  Pg 157-159 |  |
| 3 | Linear Programming | Application of linear programming to real life situation | By the end of the lesson, the learner should be able to:    Solve and interpret the optimum  solution of the linear programming to real life situations | Practice exercise Advancing BK 4,  Ex. 7.5 KLB BK 4, Ex. 7.3 | Real life situations Square boards Graph paper | - K.M, Advancing in Math F4 Pg 99-100 - KLB BK 4  Pg 157-159 |  |
| 4 | Linear Programming | Application of linear programming to real life situation | By the end of the lesson, the learner should be able to:    Solve and interpret the optimum  solution of the linear programming to real life situations | Practice exercise Advancing BK 4,  Ex. 7.5 KLB BK 4, Ex. 7.3 | Real life situations Square boards Graph paper | - K.M, Advancing in Math F4 Pg 99-100 - KLB BK 4  Pg 157-159 |  |
| 5 | Differentiation | Average and instantaneous rates of change | By the end of the lesson, the learner should be able to:    Find out the average rates of change  and instantaneous rate of change | Practice exercise Advancing BK 4,  Ex. 8.1 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg100-103 - KLB BK 4  Pg 157-159 |  |
| 6 | Differentiation | Average and instantaneous rates of change | By the end of the lesson, the learner should be able to:    Find out the average rates of change  and instantaneous rate of change | Practice exercise Advancing BK 4,  Ex. 8.1 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg100-103 - KLB BK 4  Pg 157-159 |  |
| 7 | Differentiation | Average and instantaneous rates of change | By the end of the lesson, the learner should be able to:    Find out the average rates of change  and instantaneous rate of change | Practice exercise Advancing BK 4,  Ex. 8.1 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg100-103 - KLB BK 4  Pg 157-159 |  |
| 11 | 1 | Differentiation | Differentiation Gradient of a curve at a point | By the end of the lesson, the learner should be able to:    Find the gradient of a curve at a point using tangent | Practice exercise Advancing BK 4,  Ex. 8.2 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg 109 - KLB BK 4  Pg 162-163 |  |
| 2 | Differentiation | Differentiation Gradient of a curve at a point | By the end of the lesson, the learner should be able to:    Find the gradient of a curve at a point using tangent | Practice exercise Advancing BK 4,  Ex. 8.2 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg 109 - KLB BK 4  Pg 162-163 |  |
| 3 | Differentiation | Differentiation Gradient of a curve at a point | By the end of the lesson, the learner should be able to:    Find the gradient of a curve at a point using tangent | Practice exercise Advancing BK 4,  Ex. 8.2 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg 109 - KLB BK 4  Pg 162-163 |  |
| 4 | Differentiation | Gradient of y = xn where n is a positive interger | By the end of the lesson, the learner should be able to:    Find the gradient function of the form y = xn (n = positive interger) | Practice exercise Advancing BK 4,  Ex. 8.2 and 8.3 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg 110 - KLB BK 4  Pg 164-167 |  |
| 5 | Differentiation | Gradient of y = xn where n is a positive interger | By the end of the lesson, the learner should be able to:    Find the gradient function of the form y = xn (n = positive interger) | Practice exercise Advancing BK 4,  Ex. 8.2 and 8.3 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg 110 - KLB BK 4  Pg 164-167 |  |
| 6 | Differentiation | Gradient of y = xn where n is a positive interger | By the end of the lesson, the learner should be able to:    Find the gradient function of the form y = xn (n = positive interger) | Practice exercise Advancing BK 4,  Ex. 8.2 and 8.3 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg 110 - KLB BK 4  Pg 164-167 |  |
| 7 | Differentiation | Delta notation (?) | By the end of the lesson, the learner should be able to:    - Relate the delta notation to rates of change - Define derivative of a function polynomial and differentiation | Practice exercise Advancing BK 4,  Ex. 8.2 and 8.4 KLB BK 4, Ex. 8.1 | Square boards Graph paper | - K.M, Advancing in Math F4 Pg114-115 - KLB BK 4  Pg 167-170 |  |
| 12-14 | **End Term Exams and closing** | | | | | | | |