

## Grade 11 planning 31<sup>st</sup> March – 12<sup>th</sup> June

<p><b>NOTE!</b></p> <p>Learners may contact Ms Burton or Mrs Lloyd-Jones via email, google classroom or on the whatsapp group if they are struggling or need some guidance.</p> <p>Worksheets submitted will prove that you are doing work – lack to submit this work will result in consequences.</p>	<p>31<sup>st</sup> March</p> <p>Video on simplification of exponents and introduction to surds.</p> <p>Worksheet – memo to be uploaded on 1<sup>st</sup> April</p> <p>Access to memo for revision given at the end of last term</p>	<p>1<sup>st</sup> April</p> <p>Video on solving exponential equations, including the more complicated methods.</p> <p>Worksheet – solving exponential equations (to be submitted via Google Classrom or whatsapp or email on 2<sup>nd</sup> April)</p> <p>Memo to be uploaded later on 2<sup>nd</sup> April.</p>	<p>2<sup>nd</sup> April</p> <p>Video on simplification of surds, including rationalising the denominator, which has been covered.</p> <p>Exercise – memo to be uploaded on 3<sup>rd</sup> April.</p>	<p>3<sup>rd</sup> April</p> <p>Video on solving equations which include exponents and surds.</p> <p>Worksheet on solving equations involving exponents and surds – to be submitted by the 6<sup>th</sup> April.</p> <p>Learners to submit questions on any platform so that a video revising the work can be recorded.</p>
<p>6<sup>th</sup> April</p> <p>Video revising work that learners have asked for, also explaining how to fill in a google form.</p> <p>Memo on solving equations to be uploaded.</p>	<p>7<sup>th</sup> April</p> <p>Google form test on equations, surds and solving equations.</p>	<p>8<sup>th</sup> April</p> <p>Video revising parallel lines, triangles, parallelograms and the midpoint theorem.</p> <p>Revision worksheet – memo to be uploaded on the 9<sup>th</sup> April</p>	<p>9<sup>th</sup> April</p> <p>Video introducing circle geometry – definiteions and the proof of the first theorem and the application thereof.</p> <p>Worksheet on the application of the first theorem – memo to be uploaded on 14<sup>th</sup> April.</p>	<p>10<sup>th</sup> April</p> <p><b>PUBLIC HOLIDAY</b></p>
<p>13<sup>th</sup> April</p> <p><b>PUBLIC HOLIDAY</b></p>	<p>14<sup>th</sup> April</p> <p>Video on proving the first theorem by contradiction and proving the</p>	<p>15<sup>th</sup> April</p> <p>Video on proving the third theorem and the application thereof.</p>	<p>16<sup>th</sup> April</p> <p>Google forms test on the first three circle theorems.</p>	<p>17<sup>th</sup> April</p> <p>Video on proving fourth theorem (angles of cyclic quads are</p>

	<p>second theorem and the application thereof.</p> <p>Worksheet on the application of the second theorem, must be submitted on Google classroom, whatsapp or by email on the 15<sup>th</sup> April.</p>	<p>Worksheet on applying the first three theorems – memo to be uploaded on the 16<sup>th</sup> April</p>		<p>supplementary) and the application thereof.</p> <p>Worksheet on the fourth theorem and the application thereof to be submitted by 19<sup>th</sup> April.</p>
<p>20<sup>th</sup> April</p> <p>Video on the converse of theorem 4 and the three different ways to prove that a quadrilateral is a cyclic quad</p> <p>Exercise on proving cyclic quads. Memo to be uploaded on 21<sup>st</sup> April</p>	<p>21<sup>st</sup> April</p> <p>Video explaining tangents and explaining and proving theorem 5 (tangents drawn to a circle from the same point...)</p> <p>Learners to complete exercise 10.6 on page 275 in their textbook and to submit their work by the 22<sup>nd</sup> April. Memo to be uploaded by the end of the day on the 22<sup>nd</sup> April.</p>	<p>22<sup>nd</sup> April</p> <p>Video on terminology regarding tangents and then the explanation and proof of the tan-chord theorem, as well as its converse.</p> <p>Worksheet on tan-chord theorem. Memo to be uploaded on the 23<sup>rd</sup> April.</p>	<p>23<sup>rd</sup> April</p> <p>Video explaining the three different ways to prove that a line is a tangent to a circle.</p> <p>Worksheet proving that a line is a tangent to a circle. Memo to be uploaded on the 24<sup>th</sup> April.</p>	<p>24<sup>th</sup> April</p> <p>Video explaining how to solve riders, with examples.</p> <p>Worksheet on riders, to be submitted on the 27<sup>th</sup> April; memo to be uploaded at the end of the day on the 27<sup>th</sup> April.</p>
<p>27<sup>th</sup> April</p>	<p>28<sup>th</sup> April</p> <p>Video revising all circle geometry completed thus far.</p> <p>Homework is to revise all work.</p>	<p>29<sup>th</sup> April</p> <p>Video going through riders.</p> <p>Exercise on riders to be given. Memo to be uploaded on the 30<sup>th</sup> April</p>	<p>30<sup>th</sup> April</p> <p>Day for learners to ask individual questions and to make sure they understand all work covered to this point.</p>	<p>1<sup>st</sup> May</p> <p>PUBLIC HOLIDAY</p>

<p>4<sup>th</sup> May</p> <p>Video revising grade 10 functions – characteristics of functions.</p> <p>Revision worksheet on functions. Memo to be uploaded on the 5<sup>th</sup> May.</p>	<p>5<sup>th</sup> May</p> <p>Video on the horizontal shift of a parabola and how it affects the equation of a parabola. Finding the equation of a parabola that has gone through a horizontal shift.</p> <p>Exercise on finding the equation of parabolic functions. Memo to be uploaded on the 6<sup>th</sup> May</p>	<p>6<sup>th</sup> May</p> <p>Video on the horizontal shift of a hyperbola and how it affects the equation. Finding the equation of a hyperbola that has gone through a horizontal shift.</p> <p>Exercise of finding the equations of hyperbolic functions. Memo to be uploaded on the 7<sup>th</sup> May.</p>	<p>7<sup>th</sup> May</p> <p>Day off for catch up – no video or new exercises</p>	<p>8<sup>th</sup> May</p> <p>Video on the horizontal shift of an exponential equation. Sketching an exponential function and determining the equation of a function.</p> <p>Exercise on exponential graphs. Memo to be uploaded on the 11<sup>th</sup> May</p>
<p>11<sup>th</sup> May</p> <p>Video on using completing the square to draw parabolas.</p> <p>Exercise on completing the square. Memo to be uploaded on the 12<sup>th</sup> May.</p>	<p>12<sup>th</sup> May</p> <p>Video on calculating the average gradient between two points on a function.</p> <p>Exercise on find the average gradient. Memo to be uploaded on the 13<sup>th</sup> May.</p>	<p>13<sup>th</sup> May</p> <p>Day off for catch up – no video or new exercises</p>	<p>14<sup>th</sup> May</p> <p>Videos on reflections of functions – all functions.</p> <p>Exercise on the reflection of functions. Memo to be uploaded on the 15<sup>th</sup> May.</p>	<p>15<sup>th</sup> May</p> <p>Video going through past paper functions questions.</p>
<p>18<sup>th</sup> May</p> <p>Assignment on functions to be uploaded – due on the 25<sup>th</sup> May, submitted via Google Classroom, whatsapp and email.</p>	<p>19<sup>th</sup> May</p> <p>Video going through basic Grade 10 trig revision.</p> <p>Selected numbers from exercise 7.1 to be completed. Memo to be uploaded on the 18<sup>th</sup> May.</p>	<p>20<sup>th</sup> May</p> <p>Day off for catch up – no video or new exercises</p>	<p>21<sup>st</sup> May</p> <p>Video revising special angles and the basic trig identities.</p> <p>Exercise on solving expressions using special angles and trig ratios.</p>	<p>22<sup>nd</sup> May</p> <p>Video on the reduction formulae and negative angles.</p> <p>Exercise on simplifying expressions where the reduction formulae are necessary.</p>

			Memo to be uploaded on the 22 <sup>nd</sup> May	Memo to be uploaded on the 23 <sup>rd</sup> May
25 <sup>th</sup> May  Video on co-functions and then using the reduction formulae, negative angles and co-functions to simplify expressions.  Mixed exercise. Memo to be uploaded on the 26 <sup>th</sup> May.	26 <sup>th</sup> May  Video on introducing trigonometric equations – general solutions.  Exercise on trigonometric equations. Memo to be uploaded on the 27 <sup>th</sup> May.	27 <sup>th</sup> May  Video completing the trigonometric equations – general solutions.  Exercise completing trigonometric equations. Memo to be uploaded on the 28 <sup>th</sup> May.	28 <sup>th</sup> May  Video explaining equations in a specified domain.  Exercise on equations in a specified domain. Memo to be uploaded on the 29 <sup>th</sup> May.	29 <sup>th</sup> May  Day off for catch up – no video or new exercises
1 <sup>st</sup> June  Day off for catch up – no video or new exercises	2 <sup>nd</sup> June  Day off for catch up – no video or new exercises	3 <sup>rd</sup> June  Video on restrictions in trigonometric equations.  Exercise on restrictions. Memo to be uploaded on 4 <sup>th</sup> June.	4 <sup>th</sup> June  Video revising grade 10 trigonometric functions.  Exercise on revision. Memo to be uploaded on the 5 <sup>th</sup> June.	5 <sup>th</sup> June  Video describing the effect of $a$ and $q$ on a trigonometric function.  Exercise on the change in $a$ and $q$ . Memo to be uploaded on the 6 <sup>th</sup> June.
8 <sup>th</sup> June  Video describing the effect of $p$ on trigonometric functions.  Exercise on the change in $p$ in trigonometric functions. Memo to be uploaded on the 9 <sup>th</sup> June.	9 <sup>th</sup> June  Video on the effect of $k$ on trigonometric functions.  Exercise on changing $k$ of trigonometric functions. Memo to be uploaded on the 10 <sup>th</sup> June.	10 <sup>th</sup> June  Day off for catch up – no video or new exercises	11 <sup>th</sup> June  Video on trigonometric function interpretation.	12 <sup>th</sup> June  Assignment to be given on the trigonometry covered since the 19 <sup>th</sup> May. To be submitted by the 19 <sup>th</sup> June.