

Preparation for Easter STEP 2 & 3 Courses

Please do watch the videos for any topics you have not fully covered at school yet.

Maclaurin Series

<https://www.youtube.com/watch?v=awSLv6djPAM&list=PLg2tfDG3Ww4uoHkaodf0YZvhZcDo3S4AG&index=1>

Dot Product/Scalar Product

<https://www.youtube.com/watch?v=yI-n4Zk0LbI&list=PLg2tfDG3Ww4vL2oBs4GDPMFa0opOxk9iw&index=1>

Polar Coordinates

Intro to Polar Coordinates:

<https://www.youtube.com/watch?v=oKMkfl0rLc4&list=PLg2tfDG3Ww4s6PCNde8aZ63lktppkCQKy&index=1>

Finding Areas with Polar Coordinates:

https://www.youtube.com/watch?v=1iYEQYXmkoE&list=PLg2tfDG3Ww4ts8_gI32kv8kwBGFoghYxD&index=1

Hyperbolic Functions (STEP 3)

Intro to Hyperbolic Functions:

<https://www.youtube.com/watch?v=yMzb-hvjZW4&list=PLg2tfDG3Ww4toiqqZqsXpUigtLxq2C1V&index=1>

Calculus for Hyperbolic Functions:

<https://www.youtube.com/watch?v=kKNhH1yc4t8&list=PLg2tfDG3Ww4uYcES9bXeY2Wsg9s87quT1&index=1>

Differential Equations

Particular Solutions:

https://www.youtube.com/watch?v=30EiUdfJltI&list=PLg2tfDG3Ww4vA5HXoVPJD_3u2NA5fqdPU&index=1

2nd Order Differential Equations (STEP 3):

<https://www.youtube.com/watch?v=RRi-F6WixM0&list=PLg2tfDG3Ww4vsiMrgcS-wiU9boyII0z4A&index=1>

Calculus for Parametric Equations

<https://www.youtube.com/watch?v=UD-jviVsfO4&list=PLg2tfDG3Ww4t892ID66uSNYX377HaV-uX&index=5>

Complex Numbers

Intro:

<https://www.youtube.com/watch?v=l8M1Bu2IMAY&list=PLg2tfDG3Ww4uYWzQ4DStsM49YFr1EkSj&index=1>

Conjugates:

<https://www.youtube.com/watch?v=eXSynY6jJI4&list=PLg2tfDG3Ww4tt6WujrCa69SIHUePt842-&index=1>

Modulus-Argument Form:

<https://www.youtube.com/watch?v=1c-39EZ3gck&list=PLg2tfDG3Ww4uC2KVH6pZvVIKbtvWHZGR4&index=1>

Complex Loci:

https://www.youtube.com/watch?v=1DhjdDN6FTA&list=PLg2tfDG3Ww4vaWawd0zQhUBmU_0dmFZb3&index=1

Roots of Unity:

<https://www.youtube.com/watch?v=0YGIS1jvzXg&list=PLg2tfDG3Ww4sIZSKWUv6Yol2VMNCDxFQ9&index=1>

De Moivre's Theorem (STEP 3):

<https://www.youtube.com/watch?v=AACqEXPqe8E&list=PLg2tfDG3Ww4tkXLs0hLzNaM0HG2hCdoCd&index=1>

Matrices

Intro:

<https://www.youtube.com/watch?v=0iSvYwdVVPI&list=PLg2tfDG3Ww4ucvo7CDOOr5x4kExNfXgK4n&index=1>

Matrix Transformations:

<https://www.youtube.com/watch?v=7JO1aM4LQ8Y&list=PLg2tfDG3Ww4udj7J3tTK9a5ROO1MjPm5w&index=1>

Determinants:

https://www.youtube.com/watch?v=vKucLTa3-L8&list=PLg2tfDG3Ww4vRs_Nwbl0Iye6GMIE_WTL_&index=1

Inverse Matrices:

https://www.youtube.com/watch?v=Eq78fqBcoUk&list=PLg2tfDG3Ww4uAdtOEna1FU71_CaDeaSPk&index=1