

## **Function review**

<https://www.youtube.com/watch?v=nuoHsQoI0>

<https://www.youtube.com/playlist?list=PLKXCdnugmHRnB6Z3sjPYre1VPTXNI5N7v>

[https://www.youtube.com/watch?v=klmg\\_vBnPLs](https://www.youtube.com/watch?v=klmg_vBnPLs)

<https://www.youtube.com/watch?v=71Ooin6o6lo>

## **Exponential and Log functions**

<https://www.youtube.com/watch?v=dg501i5V7X4>

<https://www.youtube.com/watch?v=SYjQWd6tDTE>

## **Trig functions**

<https://www.youtube.com/watch?v=Mc7pZFMqM34>

<https://www.youtube.com/watch?v=IiCmsiUjj4U>

## **Tangent**

<https://youtu.be/1QGJx-ukIBQ>

## **Informal Limit**

<https://www.youtube.com/watch?v=LnG1giGATII>

## **Evaluating Limits**

<https://youtu.be/NR70xPJY0p0>

<https://youtu.be/r0Fx6iLcnsQ>

## **Calculating Limits**

<https://youtu.be/sTEtBQX6REM>

## **Piecewise Functions and Absolute Values**

<https://youtu.be/LQcD-7KendE>

## **The Squeeze Theorem**

<https://youtu.be/-BuhxkKLjyw>

## **The Precise Definition of a Limit**

<https://www.youtube.com/watch?v=LnG1giGATII>

<https://www.youtube.com/watch?v=q-KrBMtmW1E>

<https://www.youtube.com/watch?v=nxlUsybv8vc>

## **Continuity**

<https://youtu.be/g9OMVSIQ2Y8>

## **Infinite Limits**

<https://youtu.be/H8KzOBMWeog>

<https://youtu.be/pNWGHeK1sRY>

## **Derivatives and rates of change**

<https://www.youtube.com/watch?v=Mqz9gOinnxI>

### **The Derivative as a Function**

<https://www.youtube.com/watch?v=C2q6vlYIH58>

### **Derivatives of Polynomials and Exponential Functions**

<https://www.youtube.com/watch?v=n-ZQz4uQqU0>

### **The Product and Quotient Rules**

[https://youtu.be/SuOM3Cd1\\_M0](https://youtu.be/SuOM3Cd1_M0)

### **Derivatives of Trigonometric Functions**

<https://youtu.be/JNFAxQCPceY>

### **The Chain Rule**

<https://www.youtube.com/watch?v=5j2IVm2WHDM>

### **Implicit Differentiation**

<https://www.youtube.com/watch?v=u7l6gszb1d8>

### **Derivatives of Logarithmic Functions**

[https://youtu.be/\\_tH2xU2G9fk](https://youtu.be/_tH2xU2G9fk)

<https://www.youtube.com/watch?v=Rp-6POEOdIc>

<https://www.youtube.com/watch?v=gPjOpE7QENM&spfreload=5>

### Rates of Change - Applications

[https://www.youtube.com/watch?v=H\\_QXBa1SW4o](https://www.youtube.com/watch?v=H_QXBa1SW4o)

### Exponential Growth and Decay

<https://www.youtube.com/watch?v=6yyZVWR95T0>

### Related Rates

<https://www.youtube.com/watch?v=VXF7XM6DN0g>

<https://www.youtube.com/watch?v=nsSuExHedCs>

### Linear Approximation and Differentials

<https://www.youtube.com/watch?v=3FbhfQT0GXY>

### Hyperbolic Functions

[https://www.youtube.com/watch?v=npETdQgL\\_LI](https://www.youtube.com/watch?v=npETdQgL_LI)

### Maximum and Minimum Values

<https://www.youtube.com/watch?v=GbsowzNr7a0>

### The Mean Value Theorem

[https://www.youtube.com/watch?v=AmOgXLMW\\_s0](https://www.youtube.com/watch?v=AmOgXLMW_s0)

## **Derivatives and Graphing**

<https://www.youtube.com/watch?v=nW8VaBIRGzc>

## **L'hopital's rule**

[https://www.youtube.com/watch?v=KXGhzie3b8s&index=52&list=PL9bIjQJDwfGuXQHuS5Jk\\_mum\\_CFILoCZX-](https://www.youtube.com/watch?v=KXGhzie3b8s&index=52&list=PL9bIjQJDwfGuXQHuS5Jk_mum_CFILoCZX-)

[https://www.youtube.com/watch?v=fIM7qVLdezY&index=53&list=PL9bIjQJDwfGuXQHuS5J\\_knum\\_CFILoCZX-](https://www.youtube.com/watch?v=fIM7qVLdezY&index=53&list=PL9bIjQJDwfGuXQHuS5J_knum_CFILoCZX-)

[https://www.youtube.com/watch?v=wXXej6AmEKQ&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFILoCZX-&index=54](https://www.youtube.com/watch?v=wXXej6AmEKQ&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFILoCZX-&index=54)

## **Curve Sketching**

<https://www.youtube.com/watch?v=ME9bTZ1da-k>

## **Optimization Problems**

<https://www.youtube.com/watch?v=iiBSjNJfWqw>

## **Newton's Method**

<https://www.youtube.com/watch?v=O2HfMwj2F60>

## **Antiderivatives**

<https://www.youtube.com/watch?v=YF3O1Tdoxis>

## **Approximating areas under curves**

[https://www.youtube.com/watch?v=oUZdflwDse0&index=79&list=PL9bIjQJDwfGuXQHuS5Jk mum\\_CFILoCZX-](https://www.youtube.com/watch?v=oUZdflwDse0&index=79&list=PL9bIjQJDwfGuXQHuS5Jk mum_CFILoCZX-)

[https://www.youtube.com/watch?v=Eq-DCz52Ozs&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFILoCZX-&index=80](https://www.youtube.com/watch?v=Eq-DCz52Ozs&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFILoCZX-&index=80)

[https://www.youtube.com/watch?v=yVZX0YRRTvA&index=81&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFILoCZX](https://www.youtube.com/watch?v=yVZX0YRRTvA&index=81&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFILoCZX)

[https://www.youtube.com/watch?v=FvhD3BblfvI&index=82&list=PL9bIjQJDwfGuXQHuS5Jk mum\\_CFILoCZX-](https://www.youtube.com/watch?v=FvhD3BblfvI&index=82&list=PL9bIjQJDwfGuXQHuS5Jk mum_CFILoCZX-)

[https://www.youtube.com/watch?v=zl02nRV4Ui4&index=83&list=PL9bIjQJDwfGuXQHuS5Jk mum\\_CFILoCZX-](https://www.youtube.com/watch?v=zl02nRV4Ui4&index=83&list=PL9bIjQJDwfGuXQHuS5Jk mum_CFILoCZX-)

<https://www.youtube.com/watch?v=3aeTPLsqVpI>

<https://www.youtube.com/playlist?list=PLKXCdnugmHRIQbqEf1hBsEw3a4VobdZLX>

[https://www.youtube.com/watch?v=Lp5KsXN4UOQ&index=84&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFILoCZX-](https://www.youtube.com/watch?v=Lp5KsXN4UOQ&index=84&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFILoCZX-)

[https://www.youtube.com/watch?v=oHIH69Ou4DE&index=85&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFILoCZX-](https://www.youtube.com/watch?v=oHIH69Ou4DE&index=85&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFILoCZX-)

[https://www.youtube.com/watch?v=1SqpYAAyBCk&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFI LoCZX-&index=86](https://www.youtube.com/watch?v=1SqpYAAyBCk&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFI LoCZX-&index=86)

## Fundamental Theorem of Calculus

[https://www.youtube.com/watch?v=SafcRvQKe4g&index=90&list=PL9bIjQJDwfGuXQHuS5J kmum\\_CFILoCZX-](https://www.youtube.com/watch?v=SafcRvQKe4g&index=90&list=PL9bIjQJDwfGuXQHuS5J kmum_CFILoCZX-)

[https://www.youtube.com/watch?v=1uxPq8Gtm18&list=PL9bIjQJDwfGuXQHuS5Jkmum\\_CFI LoCZX-&index=89](https://www.youtube.com/watch?v=1uxPq8Gtm18&list=PL9bIjQJDwfGuXQHuS5Jkmum_CFI LoCZX-&index=89)

[https://www.youtube.com/watch?v=SafcRvQKe4g&index=90&list=PL9bIjQJDwfGuXQHuS5J kmum\\_CFILoCZX-](https://www.youtube.com/watch?v=SafcRvQKe4g&index=90&list=PL9bIjQJDwfGuXQHuS5J kmum_CFILoCZX-)

<https://www.youtube.com/watch?v=UJ2DGO-IvOc>

<https://www.youtube.com/playlist?list=PLKXCdnugmHRnUdzoSP07CVmHrpAMluUBU>

## **Working with integrals**

<https://www.youtube.com/watch?v=49FfXVOIaIE>

[https://www.youtube.com/playlist?list=PLKXCdnugmHRmC4IzSf3UQKADe02S\\_l08r](https://www.youtube.com/playlist?list=PLKXCdnugmHRmC4IzSf3UQKADe02S_l08r)

## **Substitution rule**

<https://www.youtube.com/watch?v=uTT6eyXZyA&index=9&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v>

[https://www.youtube.com/watch?v=p\\_z5AU2z4DI&index=10&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v](https://www.youtube.com/watch?v=p_z5AU2z4DI&index=10&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v)

<https://www.youtube.com/watch?v=G7zJdIpXIq8&index=11&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v>

[https://www.youtube.com/watch?v=\\_Y-01MZOebQ&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v&index=12](https://www.youtube.com/watch?v=_Y-01MZOebQ&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v&index=12)

<https://www.youtube.com/watch?v=Iia2ZdvYFIc&index=15&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v>

<https://www.youtube.com/watch?v=kTXnhwQKuvU>

<https://www.youtube.com/watch?v=sho0BY1oACY>

[https://www.youtube.com/playlist?list=PLKXCdnugmHRn\\_P8ydgf1QWeImXUDH4DwK](https://www.youtube.com/playlist?list=PLKXCdnugmHRn_P8ydgf1QWeImXUDH4DwK)

## **Velocity and net change**

<https://www.youtube.com/watch?v=w6RkN97PQNc>

## **Regions between curves**

<https://www.youtube.com/watch?v=UR-eccbRwDo&index=29&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v>

<https://www.youtube.com/watch?v=N9wfeWjKiHw&index=30&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v>

<https://www.youtube.com/watch?v=4bZyfvKazzQ>

<https://www.youtube.com/watch?v=LbTH7MGMNjk>

## **Volume by slicing**

<https://www.youtube.com/watch?v=LbTH7MGMNjk>

[https://www.youtube.com/watch?v=R\\_aqSL-q6\\_8](https://www.youtube.com/watch?v=R_aqSL-q6_8)

## **Volume by shells**

<https://www.youtube.com/watch?v=R-Qu3QWOEiA>

## **Length of curves**

<https://www.youtube.com/watch?v=oHyYcAlCxYE&list=PL9bIjQJDwfGtewW75Nw7PnGNSkfqwAm3v&index=31>

<https://www.youtube.com/watch?v=R-Qu3QWOEiA>