# Z ] u vv ^µu Q

Use a Riemann sum to evaluate the definite integral [ [ G[

/ ] Y k j:Q ] [

The definition of the definite integral gives us

[ [ G[ O I P Q L I [L [ O I P Q L [L [L [

We can always use these formulas to find [L and [

[ E D Q Q Q D Q G [D L [ L Q L Q

Substitute this back in to the Riemann sum:

O I P Q [L [L [ O I P Q L L -

= O I P L Q L Q L Q Q

= O I P Q L L Q L Q L Q L Q Q

= O I P Q L L Q L Q Q

= O I P Q L L Q L Q Q

= O I P Q L L Q Q L L Q Q Q O I P Q Q L L Q Q L L Q L

Use the summation formulas:

O I P Q L [L [L [ = O I P Q Q L L Q Q Q L Q L

= - O I P Q Q Q Q + Q Q Q Q Q

= - O I P Q Q Q Q Q Q Q

= O L P Q Q Q Q Q

We can verify by using the Fundamental Theorem of Calculus:

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