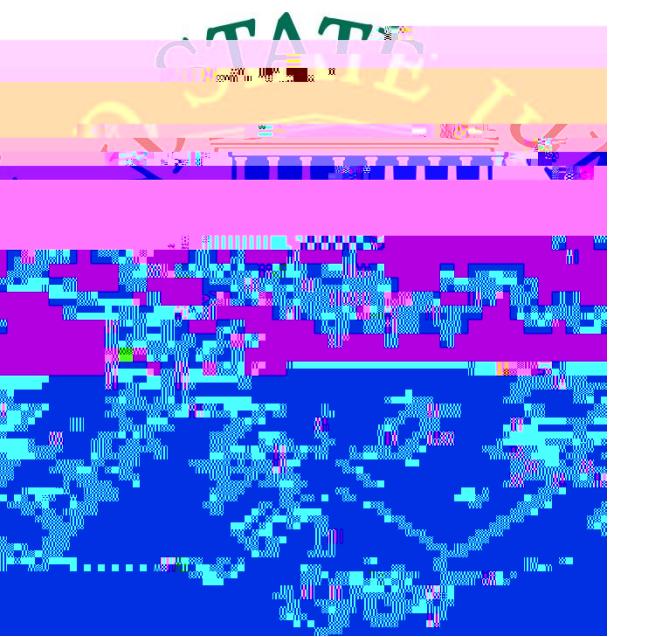


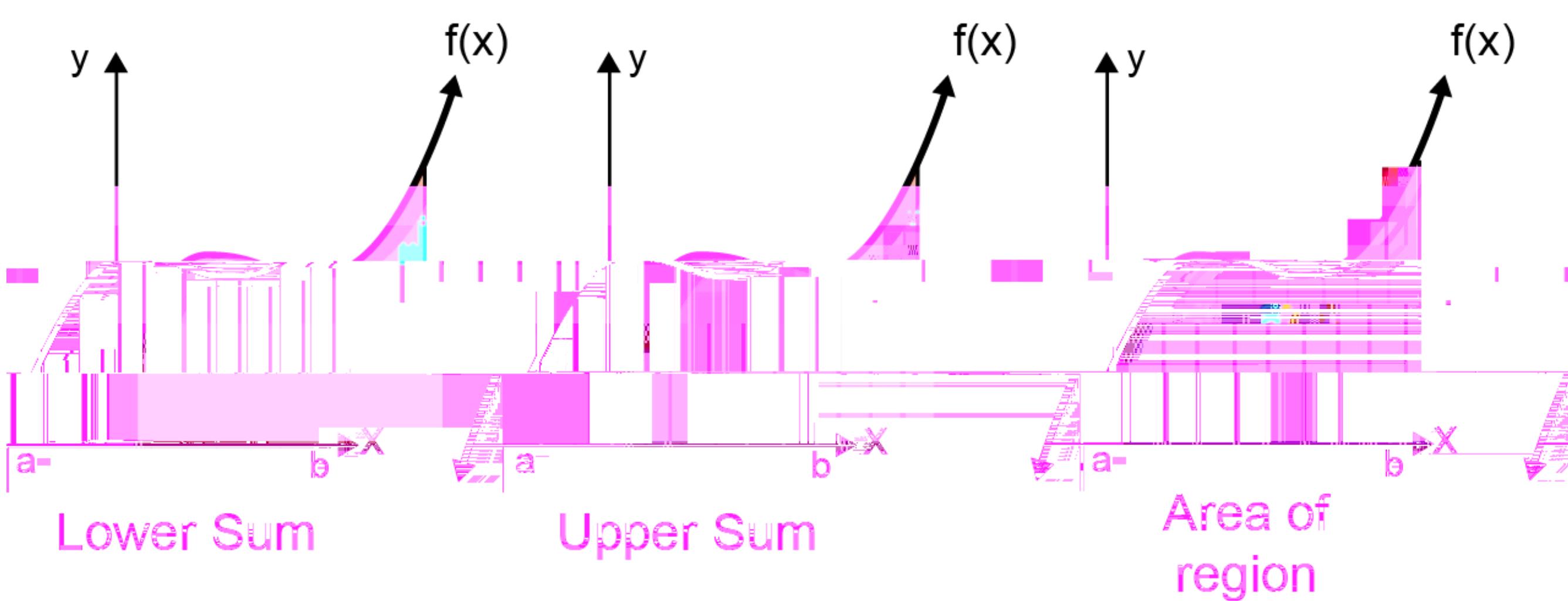
# <xn` xM k b` ?bz k MI @ k ^ W| xWt



2 b/aMj 1b` i tS° Mhl ) Zxxk MI si /nxXMi Èn` XMi

## \*3A?5žBł A\*53

HabjZ k MI t uZnujZ Xnl f {ab i n\_ t NM j y N ynk Z{ab` , Z | yZ XMj tS\_nxZI ` b ZZxySuatybly{ySMIX n{azx aMIX yMzI VZ k MnxysVJM j y by ynk Z{ab` {aZt xZjt nl XNj t nl {az hnu HZ M{ZX {n {MZ {aZ ?bz k MI y| k \_nxk | jM {aM by Vnk k nl jt | yZX {n Zy(bk MZ {az MZMj I XZx {az Vl xfZ n\_M l V{bñ SMIX k MZ Muxn xMk {aM Vh| jX` bfZ tn| {aby Zy(bk MZ w bñ jt UMyZX nl tn| xXZybxZxXZ xZz n\_MW xWt a



## ◦ Uy{xW

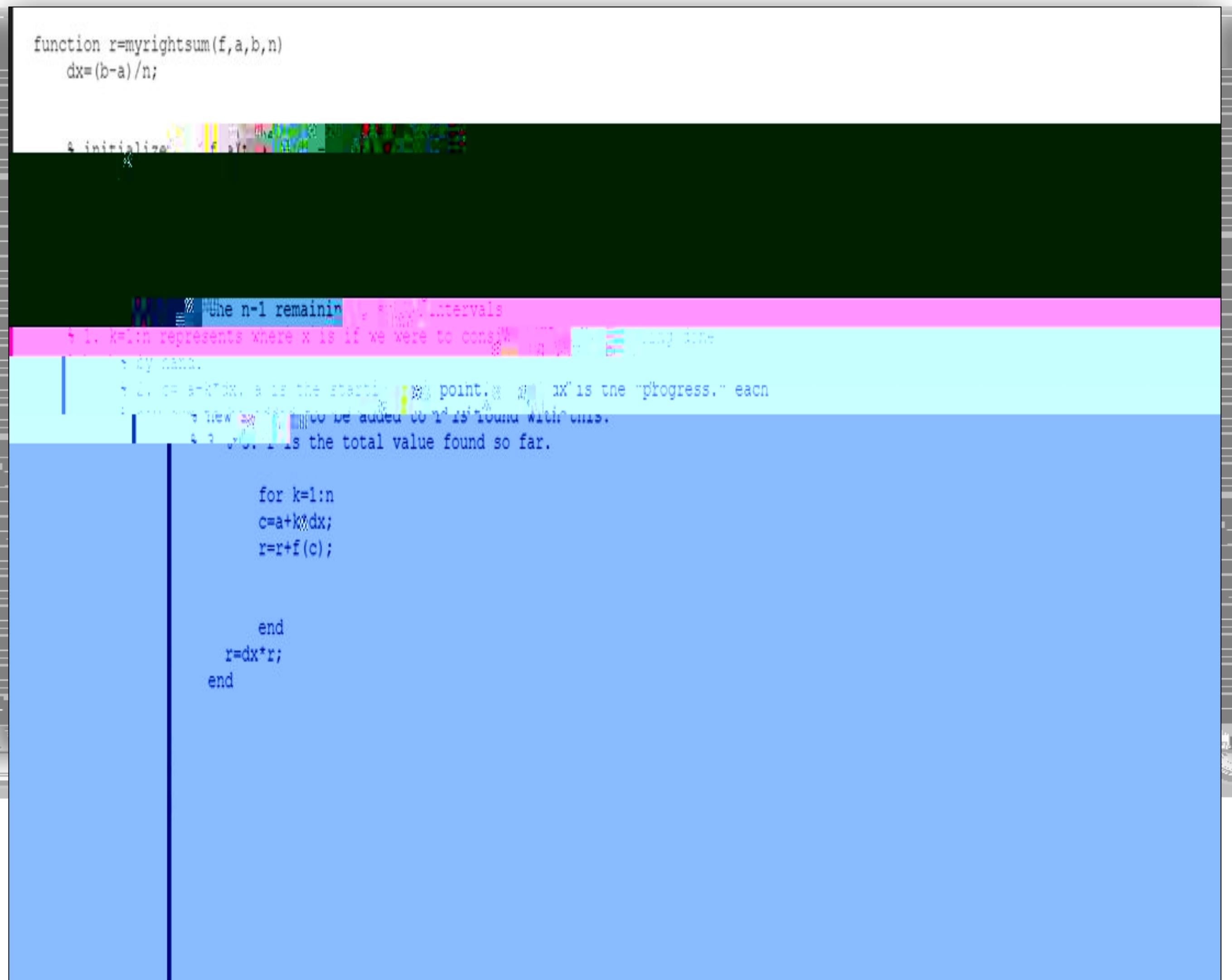
ANb` {az b {Z xMf n\_ MI ZW Mbl by M\_WZ {n\_ t NM j y uZnujZ | yZ ZfZxt XMt nl {az hnu H aZI MI ZW Mbl VMI n{ UZ b {Z xMZX {az ?bz k MI @ k \_nxk | jM {aZ | yZX {n Zy(bk MZ {az MZMh {az xMia aAaZ uxnljZk , bka {aM an| a by , azl Mhu xZw bZy {az xMia {n UZ NW xMZ {n MZx(Nb XZVb MjXZ xZz aAaby uxnljZk y{y Zjy {aM uxnljZk Ut VxZMj b M Vnk u| Zx uxnl xMk {n VJM jMz an, k MI t ?bz k MI y| k xZV(M jZy k | y| UZ | yZX {n Zy(bk MZ {az MZMh M xMia {n M VZx(Nb XZVb Mj NW xWt aAaZ k nxZ xZV(M jZy {aM MZ | yZX {az k nxZ NW xMZ {az Zy(bk Mbl by An Xn {aby M\_nxk | jM , M y VxZMZX b 2 MjNj y Muzxynl k MI uj | b {azb ZW Mbl fMj Zy b {n VZx(Nb yuZbZx fMjMjZy b {az \_nxk | jMuxn xMk y| Va M y {az \_nxk | jM yZj S {az {, nZI Xunb ySMIX {az XZybxZx XZ xZz n\_MW xWt S {n VJM jMz an, k MI t ?bz k MI y| k xZV(M jZy MZ | ZZXZX \_nx {az XZVb Mj NW xWt {azt yuZbZxS MZ {azl VJM jMz {az b Mj M y, Zx Aaby uxnl xMk yan| jX {azl azju yMfZ {bk Z nxZi b ZZxy | yb {az ?bz k MI y| k \_nxk | jMhl {az hnu a

## 5L"t A\*G" @

\*1 yanx{, Z | ZZXZX {n k MZ Muxn xMk {aM {nni {az fMjMjZy \_{az | V{bñ ASM {az yMk unb {ASU {az ZI Xunb {ASMIXI {az ZI | k UZx n\_XZVb MjujNWZy n\_MW xWt ASMIX {azl b {Z xMZX {az | V{bñ b {n {az ?bz k MI y| k \_nxk | jM\_xnk unb yM{n U{n {az yuZbZx NW xWt a

## 2 "A) 5ž @

- \*1 {Z xMjy MjX b {Z xMbl b VJM j y
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- Aaby VhXZ VJM jMz y {az xba{ aMIX ?bz k MI @ k a
- AaZ nl jt Xb\_ZxZI VZ UZ {, ZZI {az xba{ MIZ jZ { ?bz k MI @ k VhXZ by {aM i oÜP 1ÜM y tn| Z..V| XZ {az by {ZI Xunb {a

```

function Integ=IntegralError(f,a,b,err)
n=(f(b)-f(a)*(b-a))/(err);
%calculates amount of subdivisions needed for desired error

```

- nx{az uxnl xMk | V{bñ nl Z k | y| h y| uj | b {az

ZW Mbl {azt aMfZS {az jZ {MIX xba{ Un | XySMIX

{az XZVb MjZxnx xMZ {aM by xZw bZx a

## ł 53ł 1B@53@

• uZxnl k MI l n, {n MZx(Nb XZVb Mjunb {NW xWt {az MZMh {az b VZMj b | V{bñ | yb ?bz k MI @ k y VJM jMZX Ut {az 2 MjNj uxnl xMk | V{bñ Ut ZI {Zb {az xZw bZx fMj Zy a

• nxl n, {az uxnl xMk | V{bñ NW nl jt UZ | yZX nl | xMjy {aM MZ VhI {b | n| y| t b VZMj b | nx | {xZ xZyZMVA {az 2 MjNj uxnl xMk | b j UZ y{ZMj b | k nXbZx {n UZ MjZ {n Zy(bk MZ {az MZMh Mj {az Xb\_ZxZI {tuZy n ZW Mbl yMIX xMjy a

## ZZ\_ZxZI VZy

- z x@ZfZI ( | Uj b a^2 MaZk Mbj y <xn\_ZynnXM | @ a
- 2 MjZy n\_2 A1 E MIZ @x | jb i a® MathWorks®

ak Ma\_ nxi y^Vhk p a

- M l n, jZx k ZI {y

• 2 M t {aM i y^ bZI {n z x@ZfZI ( | Uj b \_nxazjb | bZ {az xZyZMVA MIZM, M y bjb MaZjb b aMIX aZI Mjy ZxZak b {az xZyZMVA a