a)

-->deff('y=f(x)','y=(x.^(1/3))+(x.^(1/2))')

-->dy=numderivative(f,64)

dy =

0.0833333

b)

--> deff('y=f(x)','y=(sqrt(16+3\*x))./(x)')

--> dy=numderivative(f,3)

dy =

-0.4555556

c)

--> deff('y=f(x)','y=((x.^2)+2)./(2-(x.^2))')

--> dy=numderivative(f,2)

dy =

4.0000000

d)

--> deff('y=f(x)','y=(sqrt(5-2\*x))./(2\*x+1)')

--> dy=numderivative(f,(1./2))

dy =

-1.2500000

e)

--> deff('y=f(x)','y=(x\*sqrt(3+2\*x))')

--> dy=numderivative(f,3)

dy =

4.0000000

f)

--> deff('y=f(x)','y=(sqrt((4\*x+1)./(5\*x-1)))')

--> dy=numderivative(f,2)

dy =

-0.0555556