

Example $f(x,y)=(x+y)(x-y)$

Ordered list	$x=2$	Backward Differentiation			
	$y=1$	start	$k=5$	$k=4$	$k=3$ end

$h_1=x$	$h_1=2$	$F_1=0$		$+3$	$+1$	$= 4$
$h_2=y$	$h_2=1$	$F_2=0$		-3	$+1$	$=-2$
$h_3=h_1+h_2$	$h_3=3$	$F_3=0$	$+1$			$= 1$
$h_4=h_1-h_2$	$h_4=1$	$F_4=0$	$+3$			$= 3$
$h_5=h_3h_4$	$h_5=3$	$F_5=1$				$= 1$

where $r=5$, $n=2$

$$\partial f(x,y)/\partial x=4$$

$$\partial f(x,y)/\partial y=-2$$