
```
% name-amlan nayak
% reg no-19BCD7143
% date-13/9/19

syms x y z t
f = [z x*y -y^2]
r = [t^2 t sqrt(t)]
l=0
u=1
dr1 = diff(r,t)
f1 = subs(f,[x,y,z],[r(1),r(2),r(3)])
nf = f1.*dr1
nf1 = sum(nf)
i = int(nf1,t,l,u)
```

$f =$

$[z, x*y, -y^2]$

$r =$

$[t^2, t, t^{(1/2)}]$

$l =$

0

$u =$

1

$dr1 =$

$[2*t, 1, 1/(2*t^{(1/2)})]$

$f1 =$

$[t^{(1/2)}, t^3, -t^2]$

$nf =$

$[2*t^{(3/2)}, t^3, -t^{(3/2)}/2]$

$nf1 =$

$$t^3 + (3*t^{(3/2)})/2$$

$$i =$$

$$17/20$$

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