

Problem Set 3 Calc 3 Due 10/11/2002

Try typing the following in Maple:

```
> with(plots):  
spacecurve([cos(t),sin(t),t],t=0..20*Pi,numpoints=200);
```

Try typing the following in Maple:

```
> plot3d(x*y*exp(-x^2-y^2),x=-1..1,y=-1..1);
```

[5pts.]1. Figure out how to plot the conical spiral $\mathbf{r}(t) = \langle t \cos t, t \sin t, t \rangle$, and find the length of this curve between the points $(0,0,0)$ and $(4\pi, 0, 4\pi)$ by using Maple to do the hard integral.

[5pts.]2. Try Stewart §14.1 #62.

[5pts.]3. Try Stewart §14.1 #64.

[5pts.]4. Try Stewart §14.1 #66.

Problem Set 3 Calc 3 Due 10/11/2002

Try typing the following in Maple:

```
> with(plots):  
spacecurve([cos(t),sin(t),t],t=0..20*Pi,numpoints=200);
```

Try typing the following in Maple:

```
> plot3d(x*y*exp(-x^2-y^2),x=-1..1,y=-1..1);
```

[5pts.]1. Figure out how to plot the conical spiral $\mathbf{r}(t) = \langle t \cos t, t \sin t, t \rangle$, and find the length of this curve between the points $(0,0,0)$ and $(4\pi, 0, 4\pi)$ by using Maple to do the hard integral.

[5pts.]2. Try Stewart §14.1 #62.

[5pts.]3. Try Stewart §14.1 #64.

[5pts.]4. Try Stewart §14.1 #66.

