

# Kouvaris Karanja Q5

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## Q5

```
t<-seq(0,10,length=1000)
x<-sqrt(t)*cos(2*pi*t)
y<-sqrt(t)*sin(2*pi*t)
plot(x,y,axes=F,type="l",lwd=3,xlab="x(t)",ylab="y(t)",col="red")

axis(1,at=seq(-3,3,by=0.5),labels=seq(-3,3,by=0.5))
axis(2)
box()
title(main=expression(
  paste("(x(t),y(t)) with polar coordinates",
    (list(sqrt(t),2*pi*t))
)))
```

$(x(t), y(t))$  with polar coordinates  $(\sqrt{t}, 2\pi t)$

