HW\_07

izd3

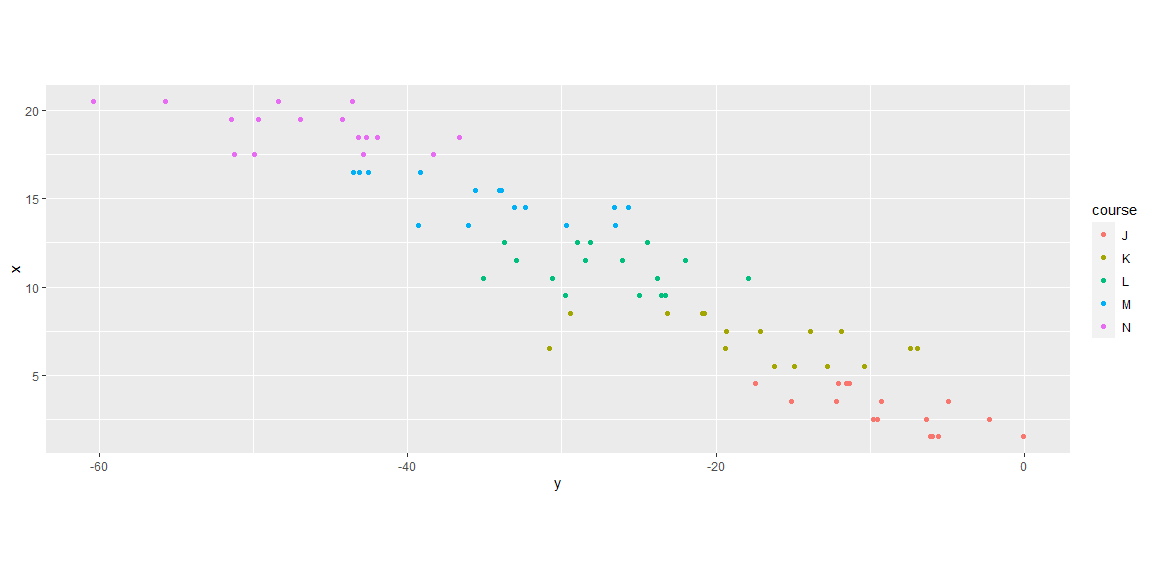
Use only commands & functions that are shown in the indicated chapter or prior chapters.

## Problem #01 - Chapter 29 Exercise #01D

# Show your work here  
library(scales)  
library(ggplot2)

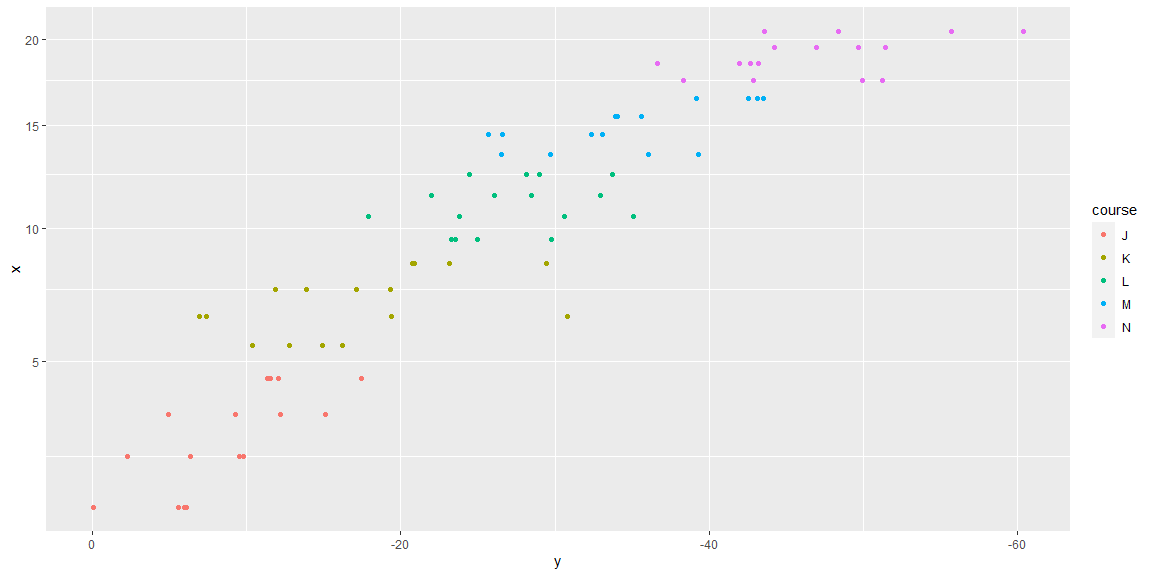
## Warning: package 'ggplot2' was built under R version 4.2.3

coordGraph002+coord\_fixed(ratio=8/7)



## Problem #02 - Chapter 29 Exercise #03D

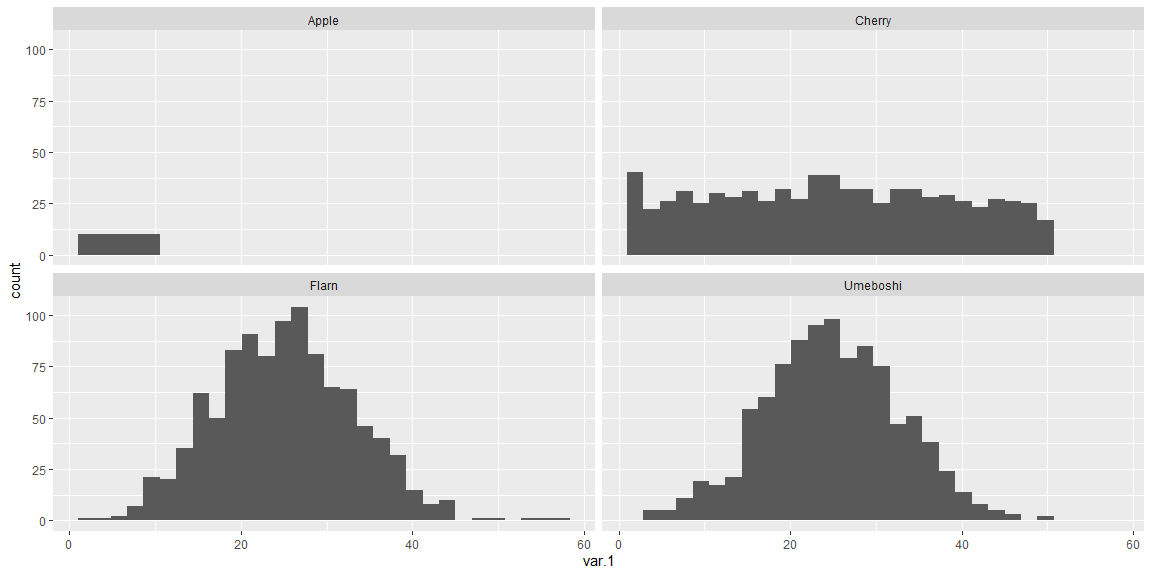
# Show your work here  
  
coordGraph002+coord\_trans(y=sqrt\_trans(),x=reverse\_trans())



## Problem #03 - Chapter 30 Exercise #01D

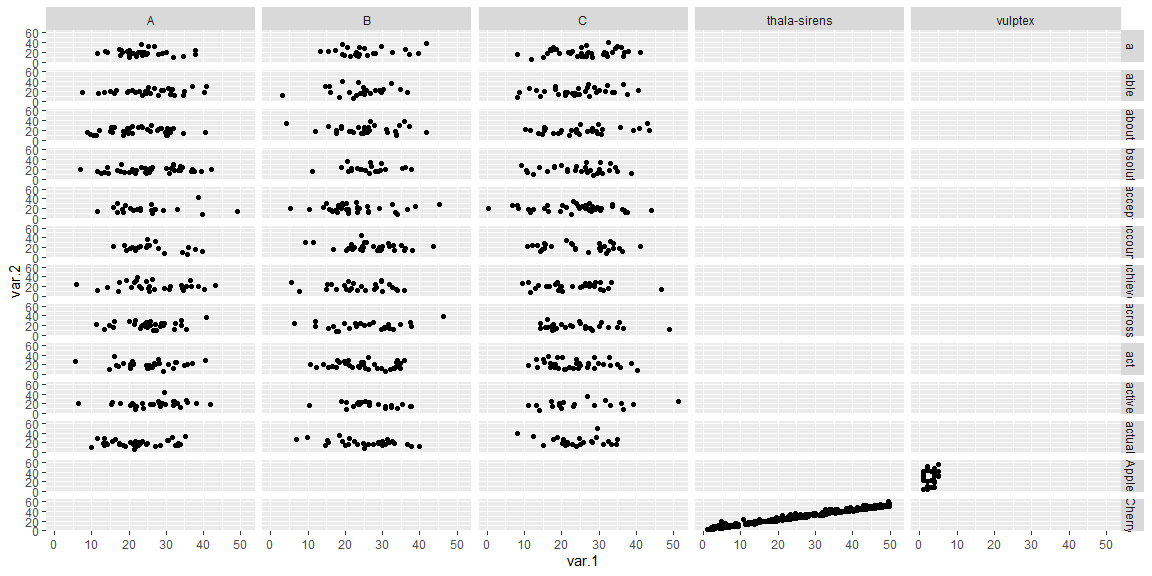
# Show your work here  
facetPlot004+facet\_wrap(~ggplot005.dat$var.3)

## `stat\_bin()` using `bins = 30`. Pick better value with `binwidth`.



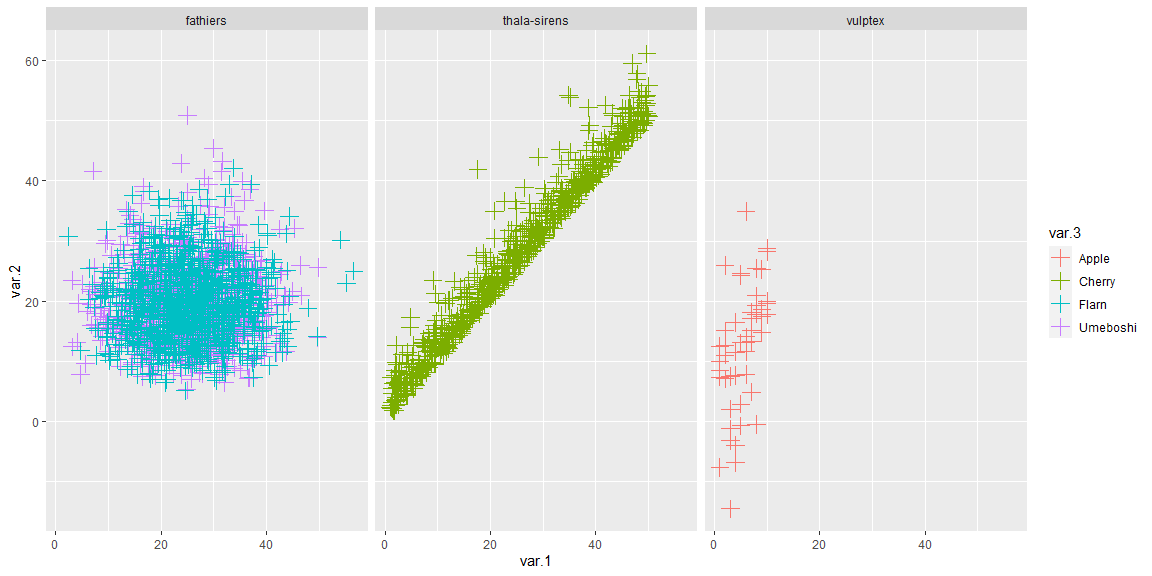
## Problem #04 - Chapter 30 Exercise #03D

# Show your work here  
facetPlot006+facet\_grid(ggplot006.dat$var.3~ggplot006.dat$var.4)



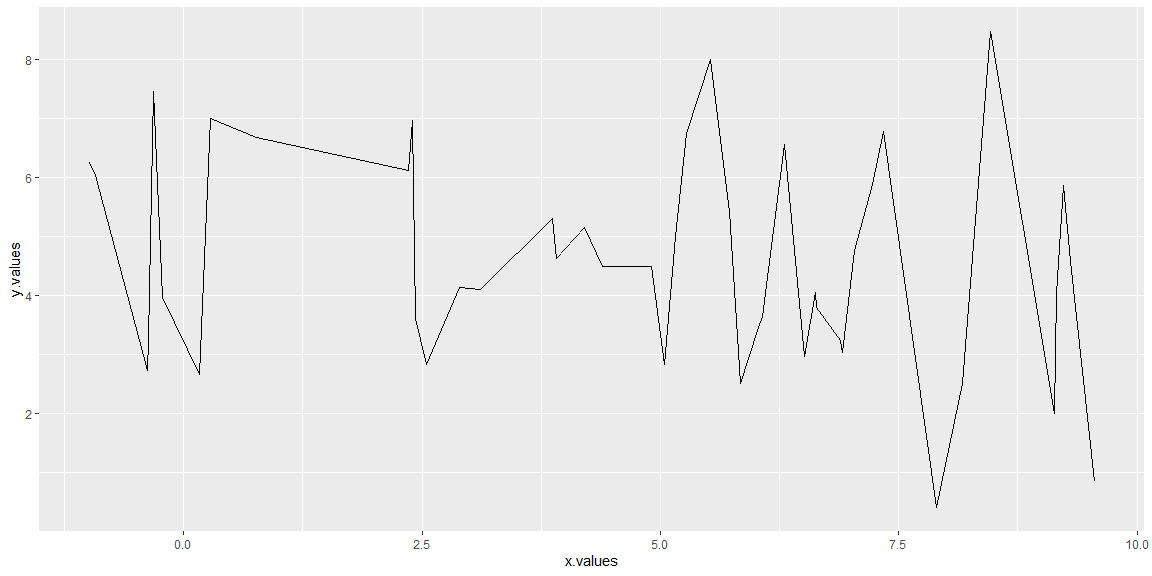
## Problem #05 - Chapter 30 Exercise #04A

# Show your work here  
ggplot005.dat|>  
 ggplot(aes(x=var.1,y=var.2,color=var.3))+  
 geom\_point(shape=3,size=4)+  
 facet\_wrap(~ggplot005.dat$var.4)



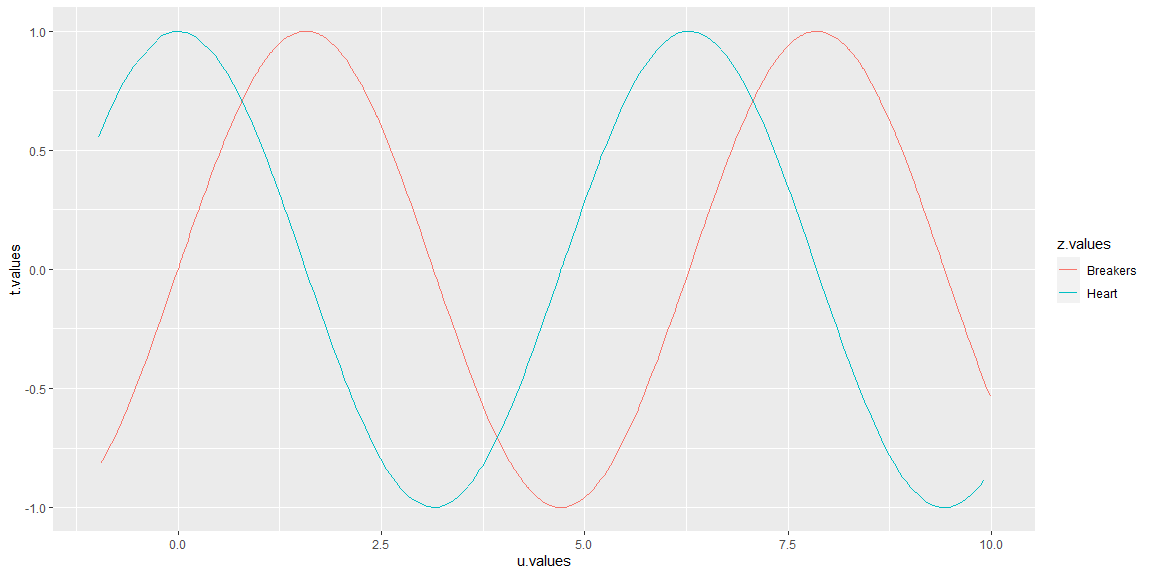
## Problem #06 - Chapter 31 Exercise #03A

# Show your work here  
ggplot009.tib|>  
 ggplot(aes(x=x.values,y=y.values))+geom\_line()



## Problem #07 - Chapter 31 Exercise #04D

# Show your work here  
ggplot010.tib|>  
 ggplot(aes(x=u.values,y=t.values,color=z.values))+geom\_line()



## Problem #08 - Chapter 31 Exercise #06

# Show your work here  
x<-c(-1,0,1,2,0,-2)  
y<-c(0,0,0,1,1,1)  
x\_head<-c(0,0.29,0,-.29)  
y\_head<-c(4,4.5,5,4.5)  
head\_data<-data.frame(x.boat=x\_head,y.boat=y\_head)  
boat\_data<-data.frame(x.boat=x,y.boat=y)  
  
  
  
x\_values <- seq(-5, 2, length.out = 1000) # 100  
  
y\_values<-c(sinpi(x\_values)/2,sinpi(x\_values)/2.7,sinpi(x\_values)/6,sinpi(x\_values)/3,  
 sinpi(x\_values)/7)  
  
x\_values<-rep.int(x\_values,times = 5)  
z\_values<-rep(c('A','B','C','D','E'),each=1000)  
  
 wavy<-data.frame(x.boat=x\_values,y.boat=y\_values,z.wave=z\_values)  
  
  
  
  
ggplot()+geom\_polygon(data=boat\_data,mapping = aes(x=x.boat,y=y.boat),  
 color='red',fill='red')+  
 geom\_line(mapping = aes(x=0,y=2:4))+  
 geom\_line(mapping = aes(x=c(0,1),y=c(2,1)))+  
 geom\_line(mapping = aes(x=c(0,-1),y=c(2,1)))+  
 geom\_line(mapping = aes(x=c(0,1.5),y=c(3.98,3)))+  
 geom\_line(mapping = aes(x=c(0,-1.5),y=c(3.98,3)))+  
 geom\_point(aes(x=0,y=4.28),size=20)+  
 geom\_line(data=wavy,mapping = aes(x=x.boat,y=y.boat,color=z.wave))+  
 geom\_hline(yintercept = 5,color='white')

