“Homework 2” Justin Minsk

#2.1

p <- c(2, 3, 5, 7, 11, 13, 17, 19)

length(p)

#2.2

gas <- c(65311, 65624, 65908, 66219, 66499, 66821, 67145, 67447)

diff(gas)

#difference between the current and the one after, so in this case how many miles went

#inbetween fill ups

mean(gas)

#average milage

mean(diff(gas))

#average miles between fill ups

#2.3

#1

x <- c(2, 5, 4, 10, 8)

#2

sqrt(x)

#3

(x - 6)

#4

(x - 9)^2

#2.5

#1

x1 <- c( 2, 3, 5, 7, 11, 13, 17, 19)

x1

#2 3 5 7 11 13 17 19

#2

x2 <- seq(1:10)

x2

#1 2 3 4 5 6 7 8 9 10

#3

x3 <- 1 / seq(1:10)

x3

#1.0000000 0.5000000 0.3333333 0.2500000 0.2000000 0.1666667 0.1428571 0.1250000 0.1111111 0.1000000

#4

x4 <- seq(1:6)^3

x4

#1 8 27 64 125 216

#5

x5 <- 1964 + seq(0:49)

x5

#1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981

#1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998

#1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

#6

x6 <- c(14, 18, 23, 28, 34, 42, 50, 59, 66, 72, 79, 86, 96, 103, 110)

x6

#14 18 23 28 34 42 50 59 66 72 79 86 96 103 110

#7

x7 <- seq(0,1000, by = 25)

x7

# 0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400

#425 450 475 500 525 550 575 600 625 650 675 700 725 750 775 800 825

#850 875 900 925 950 975 1000

#2.7

-1:3

#-1 0 1 2 3

#- before :

1:2\*3

#3 6

#\* before :