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########################################
#### SUGGESTED EXERCISE SOLUTIONS ####
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#########
## 2.1 ##
#########
#(a)
(6*2.3+42)/(3^(4.2-3.62))
#(b)
(-4)^2+2
#(c)
sqrt(x=0.5*((25.2+15+16.44+15.3+18.6)/5))
#(d)
log(x=0.3)
#(e)
exp(x=-1.203973)
#(f)
-0.00000000423546322

#########
## 2.2 ##
#########
#(a)
foo <- 3^2*4^(1/8)
#(b)
foo <- foo/2.33
foo
#(c)
bar <- -8.2e-13
#(d)
foo*bar

#########
## 2.3 ##
#########
#(a)
foo <- seq(from=5,to=-11,by=-0.3)
foo
#(b)
foo <- sort(x=foo,decreasing=FALSE)
foo
#(c)
bar <- rep(x=c(-1,3,-5,7,-9),times=2,each=10)
sort(x=bar,decreasing=TRUE)
#(d)
baz <- c(6:12,rep(5.3,times=3),-3,seq(from=102,to=length(bar),length.out=9))
baz
#(e)
length(baz)
```

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#########
## 2.4 ##
#########
#(a)
foo <- c(seq(from=3,to=6,length.out=5),rep(c(2,-5.1,-33),times=2),7/42+2)
foo
#(b)
bar <- foo[c(1,length(x=foo))]
bar
#(c)
baz <- foo[-c(1,length(x=foo))]
baz
#(d)
c(bar[1],baz,bar[2])
#(e)
foo <- sort(x=foo,decreasing=FALSE)
foo
#(f)
foo[length(x=foo):1]
sort(x=foo,decreasing=TRUE)
#(g)
baz[c(rep(x=3,times=3),rep(x=6,times=4),length(x=baz))]
#(h)
qux <- foo
qux[c(1,5:7,12)] <- 99:95
qux

#########
## 2.5 ##
#########
#(a)
c(2,0.5,1,2,0.5,1,2,0.5,1)/c(2,0.5,1)
#(b)
faren <- c(45,77,20,19,101,120,212)
cel <- 5/9*(faren-32)
cel
#(c)
foo <- rep(x=c(2,4,6),times=2)*rep(x=c(1,2),each=3)
foo
#(d)
foo[2:5] <- c(-0.1,-100)
foo
```