Pfaff - Applied Calculus with R - Erratum

NOTE: The pages refer to the hard copy version of the textbook. If you find other errors please email me at tpfff@ithaca.edu. Thank you. Updated on August 13, 2024.

Chapter 4

- (page 55) Exercise 3. The function should be $20000 + 25x - x^2$.
- (page 55) Exercise 4. The function should be $10000 + 200x - 2x^2$.
- (page 57) Exercise 26 needs space around at.

Chapter 6

- (page 70) Exercise 20. The sentence Is change or percentage change a better measure of how much work went into reaching the peak? should be Is change or percentage change a better measure of how Arctic ice extent changed?
- (page 71) Exercise 21. The sentence Is change or percentage change a better measure of how much work went into reaching the peak? should be Is change or percentage change a better measure of wages have changed?
- (page 71) Exercise 22. The sentence Is change or percentage change a better measure of how much work went into reaching the peak? should be Is change or percentage change a better measure of wages have changed?

Chapter 7

- (page 81) Exercise 3. $f(-2.5)$ not $f(0 - 0.25)$.

Chapter 9

- (page 119) Exercise 12. Let $A(n)$ not Let $A(N)$.
- (pages 132-133) For exercises 41 to 50, add 4 to the problem they refer to. For example, in exercise 41 it should be problem 31 not problem 27.

Chapter 11

- (page 153) Exercises 13-16 the font is too small.

Chapter 14

- (page 183) Exercise 13. The answer is $18 \sin(x) \cos(x)$.

Chapter 15

- (page 191) Exercise 23. The answer is incorrect. Here is code that will produce the first maximum $(7.73, 0.13)$.

```
> library(Deriv)
> library(rootSolve)
> f<-function(x){sin(x)/x}
> f_p<-Deriv(f)
> root<-uniroot.all(f_p,c(0.1,9))
> par(mar=c(4,5,2,2))
> curve(f,0,9,lwd=2,ylab=expression(f(x)==sin(x)/x))
```

```
>  grid(NULL,NULL,col="black")
>  points(root[2],f(root[2]),pch=16,cex=1.5,col="purple")
>  text(root[2],f(root[2]),paste("(",round(root[2],2),",",round(f(root[2]),2),")",
+ sep=""),pos=3)
```

Chapter 19

- (page 240) Exercise 21. The line should be $y = 3 - x/2$.

Chapter 20

- (page 248) Exercise 15. $D(x)$ should be $D(p, l)$.
- (page 249) Exercise 16. $D(x)$ should be $D(g, b)$.

Chapter 25

- (page 300) Exercise 19. Does should be Do.
- (page 300) Exercise 20. Does should be Do.

Appendix D

- (page 397) Exercises 11 and 14 the font is too small.

Appendix F

- (page 404) Exercises 5, 6, 7, 8, 17, 18, 33, and 34, the font size is too small.