Homework 10
MTH 4230, Spring 2020
Due Wed., May 6

Chapter in Book	Problems
14	14.7*, 14.38** (skip parts *b* and *f*)

* For **Problem 14.7**, **part *a***, the maximum likelihood estimators are those computed by the `glm()` function, with `family = binomial`, and they can be viewed using `summary()`. For **part *b***, after making the scatterplot, the fitted response function can be added using:

```
> curve(exp(b0+b1*x)/(1+exp(b0+b1*x)), from = 30, to = 50,
  add = T)
```

where `b0` and `b1` are the maximum likelihood-estimated coefficients. Then the *lowess curve* can be added using:

```
> lines(lowess(x, y), lty = "dashed")
```

where `x` and `y` should be replaced by the names of the predictor and response variables depicted in the scatterplot.

** For Problem 14.38, you can fit the Poisson regression function using `glm()`, with with `family = poisson`, and the results can be viewed using `summary()`. For **part *d***, after making the scatterplot, the fitted Poisson response function can be added using:

```
> curve(exp(b0+b1*x), from = 30, to = 50, add = T)
```

where `b0` and `b1` are the maximum likelihood-estimated coefficients obtained from `summary()` (and the values `30` and `50` will need to be changed).