Function Telephone

Pulliam Lab, August 2013

Function 1:

$$f_1(x) = \frac{1}{1 + e^{-(ax+b)}}$$

Function 2:

$$f_2(x) = \frac{1}{b\sqrt{2\pi}} e^{-\frac{(x-a)^2}{2b^2}}$$

Function 3:

$$f_3(x) = 1 - e^{-(x/b)^a}$$

Function 4:

$$f_4(x) = \frac{a}{b}\left(\frac{x}{b}\right)^{a-1} e^{-(x/b)^a}$$

Function 5:

$$f_5(x) = abx^{a-1}(1 - x^a)^{b-1}$$

Function 6:

$$f_6(x) = 1 - (1 - x^a)^b$$

Additional Practice

Function 7:

$$f_7(x) = a(x-b)^2$$

Function 8:

```
f_8 <- function(x,a,b){
  a*b*exp(a*x)*exp(b)*exp(-b*exp(a*x))
}
```

Function 9:

$$f_9(x) = \frac{ax}{1+x/b}$$

Function 10:

```
f_10 <- function(x,a,b){
  x*exp(a*(1-x/b))
}
```

Function 11:

$$f_{11} = \frac{ax}{ax-(1-a)b}$$

Function 12:

```
f_12 <- function(x,a,b){
  a*x*(1-x/b)
}
```