VECTOR OPERATIONS

Vector Arithmetic:

- Loops seldom needed: Most functions work vectorized. Very useful; cf. Ranadu/R/AirTemperature.R
- If vector operations use different-length vectors, the shorter one will be recycled.
- Logical tests are very useful:
 As indices
 (vectors, data.frames)
 To replace select values:
 Data[Data\$TASX < 130,] <- NA</p>
 E.g., print each 10 s in sequence:

a[a %% 10 == 0]

R input and response:

```
a <- sin((x <- 1:1200) * pi/40)  # period is 80 s
r <- 1:1200 %% 90 == 0  # sample at 90 s
plot(x,a,type='l', col='blue')
lines(x[r],a[r], col='red')
title("Classic Demonstration of Aliasing")</pre>
```

Classic Demonstration of Aliasing

