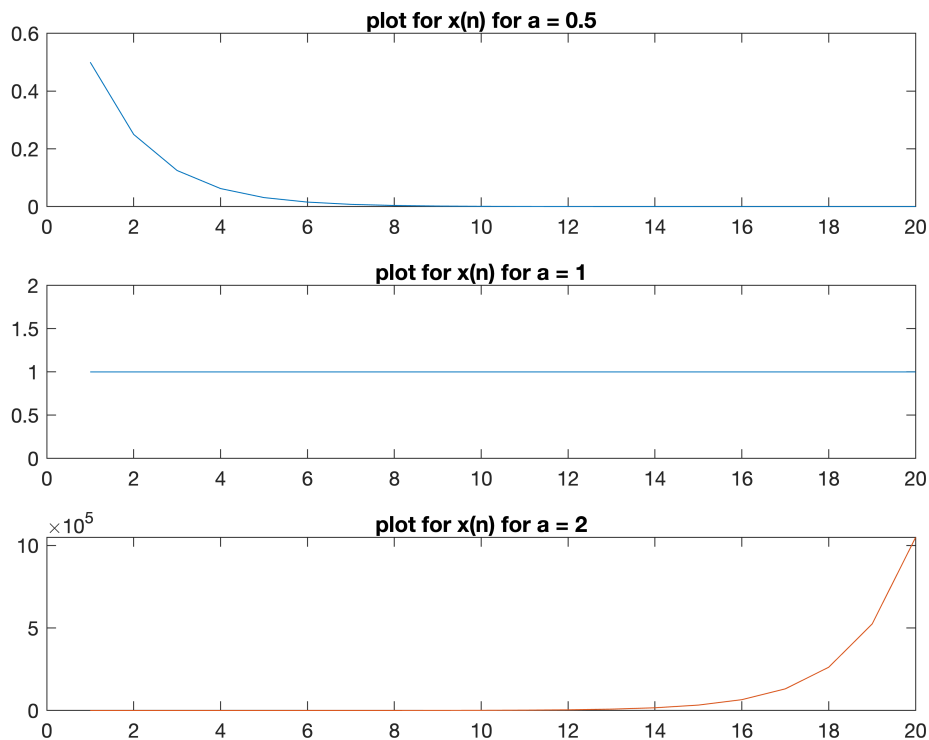


a) Plotting the exponentials for different values of  $a$

```
n = 1:20;  
a = [0.5, 1, 2];  
  
% plot regular axes  
figure(1);  
subplot(3, 1, 1);  
plot(n, 0.5.^n)  
title("plot for x(n) for a = 0.5")  
subplot(3, 1, 2);  
plot(n, 1.^n)  
title("plot for x(n) for a = 1")  
subplot(3, 1, 3);  
plot(n, 2.^n)  
title("plot for x(n) for a = 2")
```



b) plotting the summation sequence over a finite range

```
figure(2)  
L = 1:20;  
subplot(3, 1, 1);  
plot(L, 0.5 * (1 - 0.5.^L) / (1 - 0.5))  
title("plot for y(L) for a = 0.5")  
subplot(3, 1, 2);  
plot(L, L)
```

```

title("plot for y(L) for a = 1")
subplot(3, 1, 3);
plot(L, 2 * (1 - 2.^L) / (1 - 2))
title("plot for y(L) for a = 2")

```

