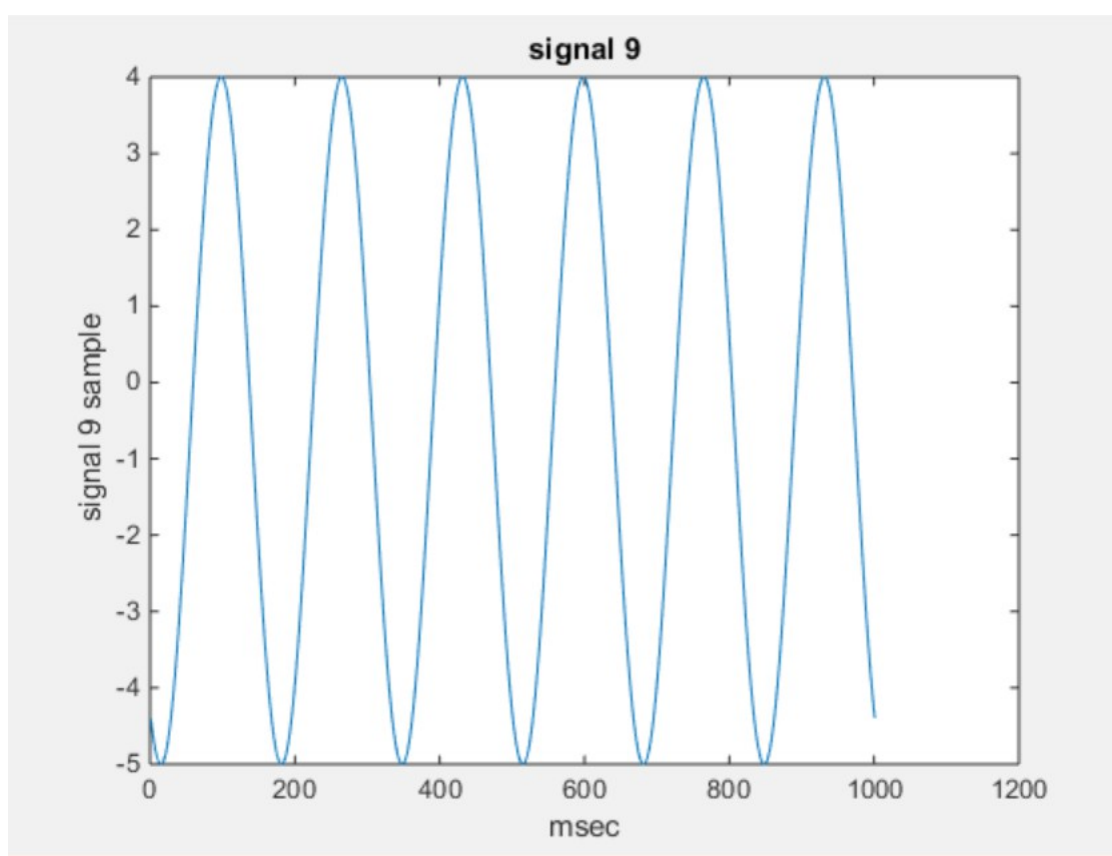
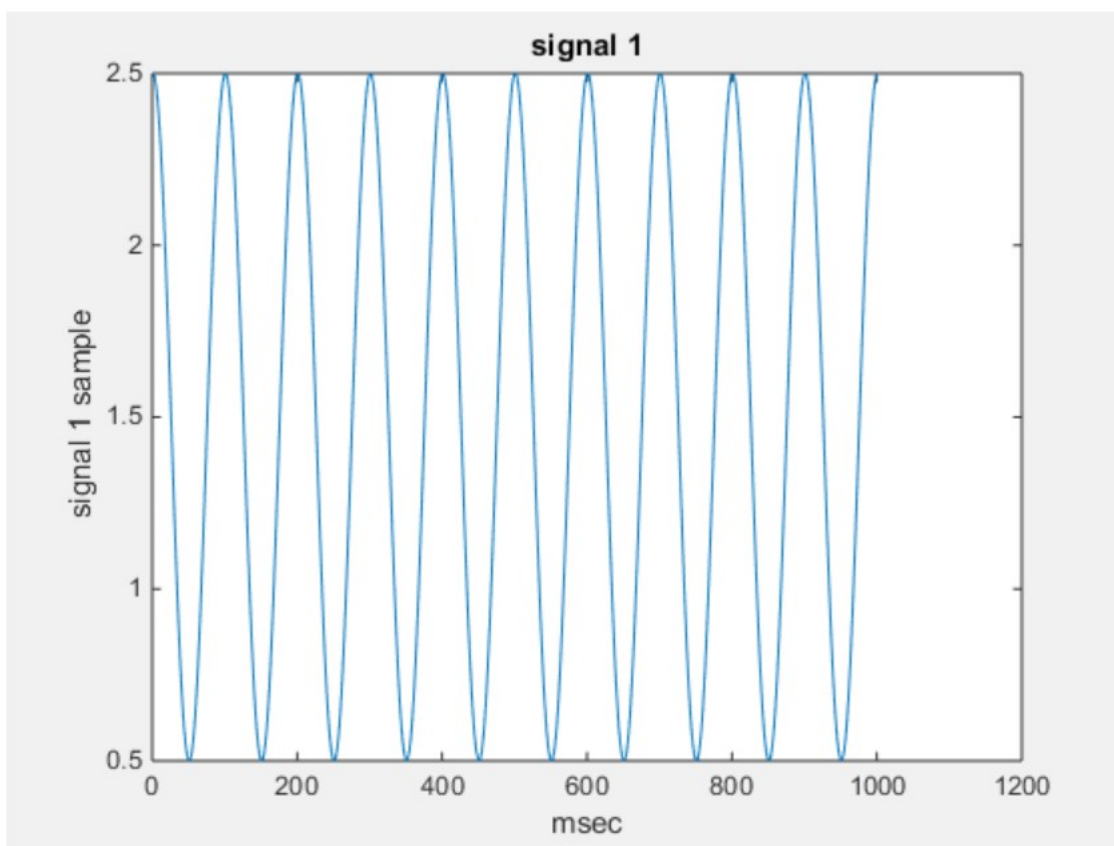
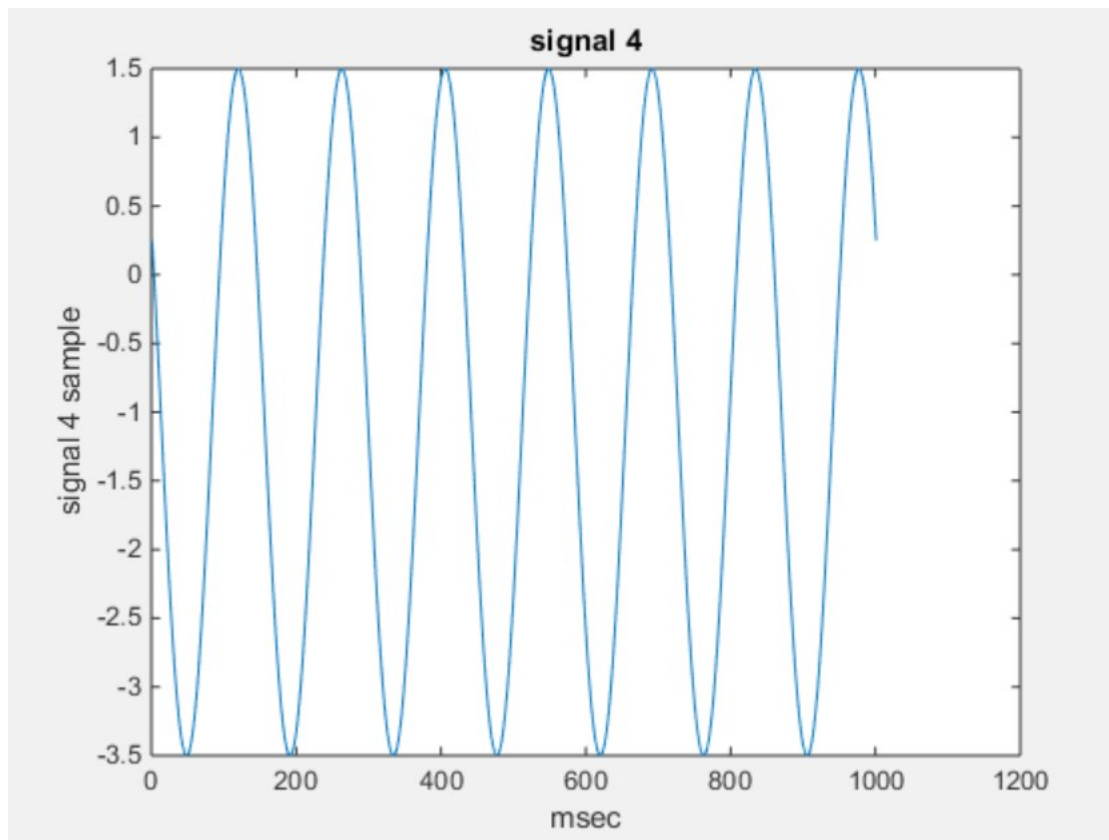


a)





b)

c)

```
function [C, A, f, phi] = parameters_of_sin(fs, x)
```

```
C = (max(x) + min(x))/2;
```

```
A = (max(x) - min(x))/2;
```

```
n1 = 0;
```

```
n5 = 0.9998*(max(x));
```

```
for n=1:length(x)
```

```
    if(x(n) >= n5)
```

```
        if n1 == 0
```

```
            n1 = n;
```

```
        end
```

```
end
```

```
f = 1/(n2-n1) * fs;
```

```
n2 = 0;
```

```
n3 = 0;
```

```
for n=1:length(x)
```

```
if( x(n) > n5)
    if n2 ~= 0
        n3 = n;
    else
        n2 = n;
    end
end
end
end
phi = (n2-1)/(n3-n1)*360;
if phi ~= 0
    phi = 360 - phi;
end
end
end
```