

## Quiz 1 (B)

### Problem 1)

ans =

1 2 3 4 5 6 7 8 9 10

ans =

2 3 4 5 6 7 8 9 10

### Problem 2)

There are different ways to do this. Here is one method.

```
Num = 0;
```

```
for ii = 1:20
```

```
    if floor(ii/3) == ii/3
```

```
        num = num + 1;
```

```
    end
```

```
end
```

### Problem 3)

Simpson's method.

```
NInterval = 100;
```

```
EndPoints = linspace(A,B,NInterval+1);
```

```
DeltaX = EndPoints(2) - EndPoints(1);
```

```
MidPoints = EndPoints(1:end-1)+DeltaX/2;
```

```
F = @(x)cos(x);
```

```
IntResult = 0;
```

```
IntResultArray = zeros(NInterval,1);
```

```
for nn = 1:NInterval
    Area = F(MidPoints(nn))*DeltaX;
    IntResult = IntResult + Area;
    IntResultArray = IntResult;
end
```

Problem 4)

```
X = linspace(0,6,13);
Y = cos(X);
figure
Bar(X,Y)
xlabel('X')
ylabel('cos(X)')
```

Problem 5)

```
f = @(X) 5*X;

function [Out] = f(X)
    Out = 5*X;
end
```

Problem 6)

```
A = linspace(0,2,5)
```

```
A =    0    0.5    1    1.5    2
```

```
B = (0:4:8)
```

```
B =    0    4    8
```

```
[C D] = meshgrid( (1:3), (1:2))
```

```
C =    1    2    3
```

```
    1    2    3
```

```
D =    1    1    1
```

```
    2    2    2
```

Problem 7)

```
clear
```

```
Cnt = 0;
```

```
Total = 0;
```

```
while Cnt < 5
```

```
    Cnt = Cnt + 1;
```

```
    Total = Total + Cnt;
```

```
    fprintf('Cnt %d Total %d \n',Cnt,Total)
```

```
end
```

Problem 8)

5

Problem 9)

switch X

case X == 1

fprintf('X=1\n')

case X == 2

fprintf('X=2\n')

otherwise

fprintf('Invalid X\n')

end

Problem 10)

X(1,:)

X(5,4) or X(4,5)

X(:,2)

X(3,2:6)

X(2:3,2:3)

