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CSC 349A

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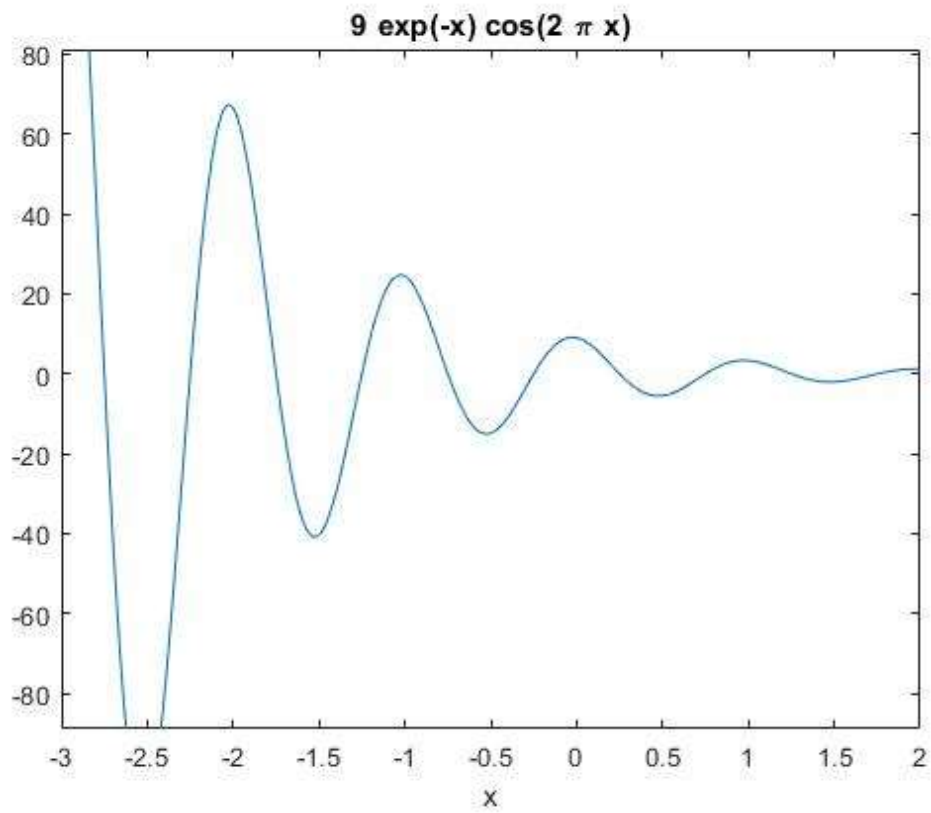
The matlab function did not work which I did not know the reason why, even everything looks fine.

### Question 1

(a)

```
function Newton(x0, e, i_max, f, fp)
i = 1;
xn = x0;
root_found = false;
fprintf(' iteration      approximation \n')
while i <= i_max
    Xn = xn - (f(xn)/fp(xn));
    fprintf('%6.0f %18.8f \n', i, Xn);
    if abs(1 - (Xn/xn)) < e
        root = Xn;
        root_found = true;
        break;
    end
    xn = Xn;
    i = i+1;
end
if root_found == false
    fprintf(['failed to converge in %g iteration\n', i_max])
    root = [];
end
```

(b)



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(d)

Question 2

(a)

