Question 7: (3 points)

Find the x- and y-intercepts of the graph of the function f(x) = -2|x+7| + 4.

Enter your answers as points, (a, b).

Enter the *x*-intercepts in order of increasing *x*-value. If there are no *x*-intercepts, enter NA in both answer areas.

Answer

x intercept (-9,0) and (-5,0) y intercept (0,-10 The intercepts are (-9,-10) and (-5,-10)

```
y= -2|x+7|+4;
solve for y- intercept, @x=0 from Notesale.co.uk
y = -2|0+7|+4
y = -14+4 page for for for
solve for x- intercept, @y=0
@ positive value of absolute yet
) = -2|x+7|+4
0 = -2|x+7|+4
-2|x+7|=-4
|-2x-14| = -4
2x+14 = -4
2x = -4 - 14
x = -18/2
x= -9
 @ negative value of absolute value
-2|x+7|=-4
|-2x-14| = -4
-2x-14= -4
-2x = -4 + 14
x = 10/-2
x = -5
x intercept (-9,0) and (-5,0)
y intercept (0,-10)
The intercepts are (-9,-10) and (-5,-10)
```