

# Blake Q's #11

July 2, 2020

Try and complete all of the problems by hand. Use Desmos / CAS to visualize what is going on.

## Question 1

Simplify and factorise  $f(x)$  so that it is easy to graph.

$$f(x) = x^2 + 10x + 16 \quad (1)$$

## Question 2

Graph  $f(x)$  by hand, use Desmos / CAS to check (x-ints dont have to be right, but make sure the y-int is correct).

$$f(x) = (x - 10)(x + 1) - 10 \quad (2)$$

## Question 3

This is a throwback. Rearrange in terms of y. (It looks cool if you graph it on Desmos)

$$x = \sin\left(\sqrt{y + 10}\right) - 1 \quad (3)$$