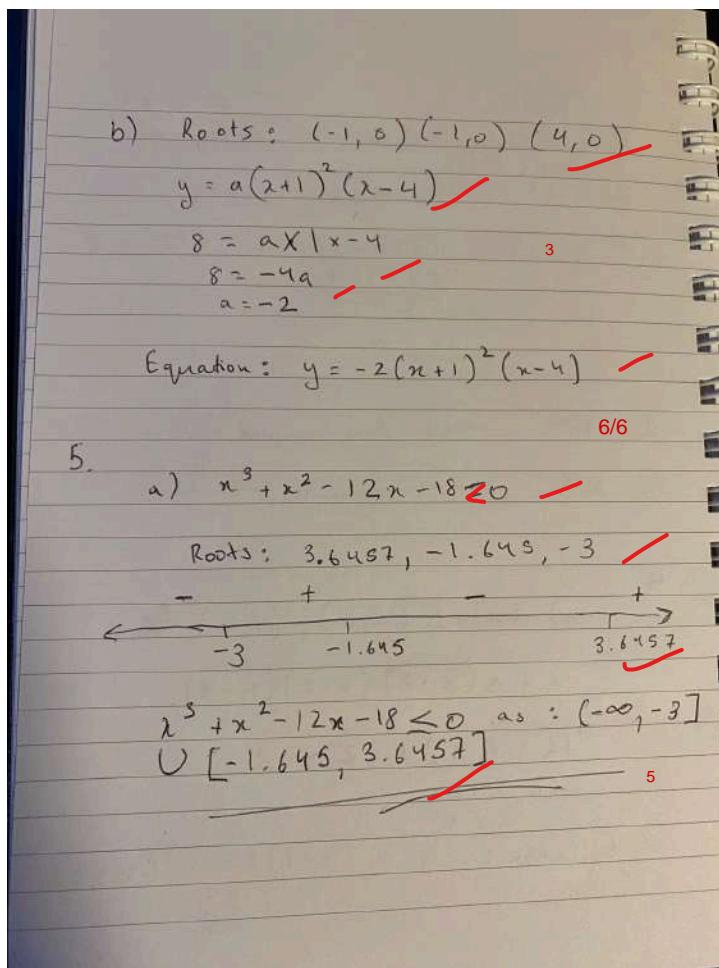
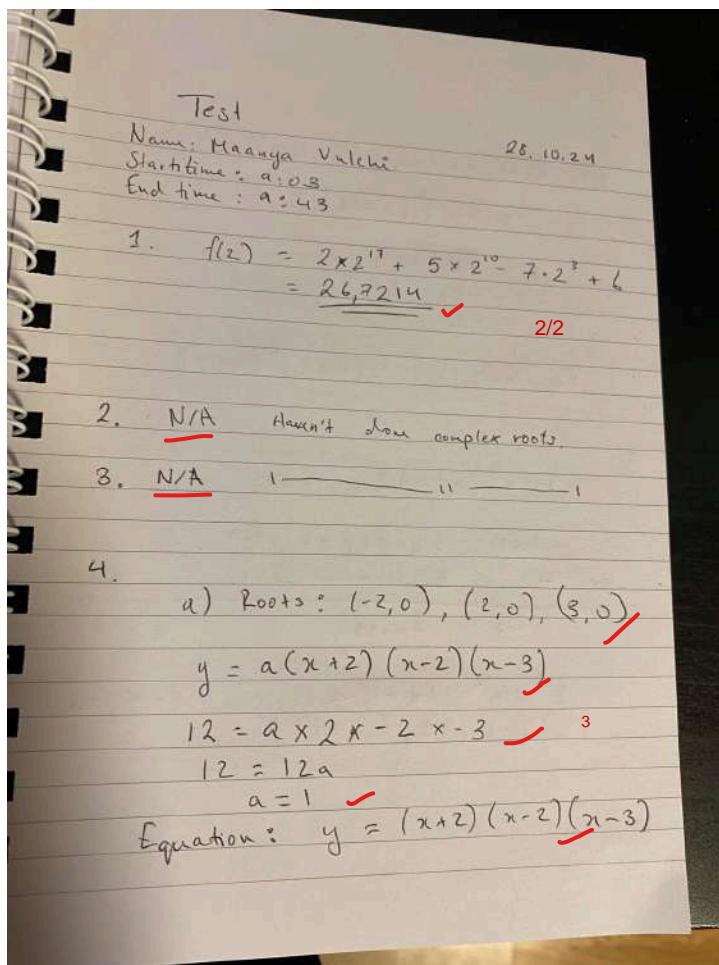


24
27



b) $5x^3 + 4x^2 - 25x - 20 \geq 0$
 Roots: $2.236, -0.8, -2.236$

$5x^3 - 20 \geq 25x - 4x^2$ as $\underline{[-2.236, -0.8]} \cup [2.236, \infty)$ 5

6. N/A Haven't done sin, cos etc 10/12

7. $f(x) = x^3$
 $(f \circ f)(x) = (x^3)^3$ (Checking with example)
 $= x^9$
 Is $x^9 = -(-x)^9$ $f(x) = -f(-x)$
 Let's take 1 as x .
 $1^9 = -(-1)^9$
 $1 = -(-1)$
 $1 = 1$
 So it will be odd. 1/2

8. N/A

9. N/A

10.

a) V.A.: $\frac{x+1}{(x+2)(x-3)}$

Denominator is 0 when $x = -2$ and
 When $x = 3$

Vertical Asymptotes: $x = -2$
 $x = 3$ 2

H.A. * $y = 0$ (x -axis)

b) $y = \frac{1}{x-6}$ make $x = 0$
 $y = -\frac{1}{6}$ y-intercept $\left(0, -\frac{1}{6}\right)$

$$0 = \frac{x+1}{x^2-x-6}$$

$$x+1 = 0 \quad \text{x-intercept} \quad 3$$

$$x = -1 \quad \left(-1, 0\right)$$

c) N/A. 5/5