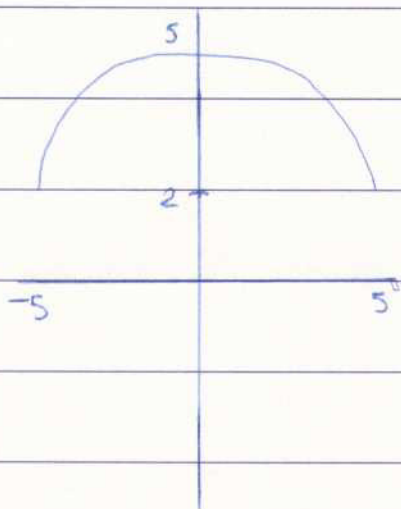




Q5

a)



Domain: ~~$\forall x$~~

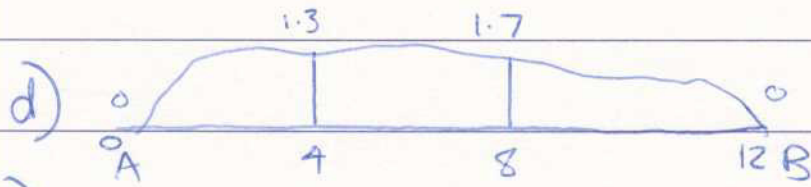
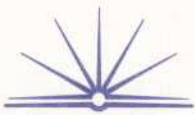
$$x \geq -5, x \leq 5$$

Range: $y \geq 2, y < 5$

b) i) 1.001 (3 dp)

ii) 2^{1000} there are 30 digits.

c)



i)

$$A \doteq \frac{h}{2} (f(a) + 2f(\dots) + f(b))$$

$$\doteq \frac{4}{2} (0 + 2(1.3 + 1.7) + 0)$$

$$A \doteq 30$$

ii)