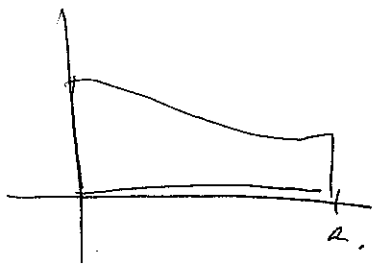


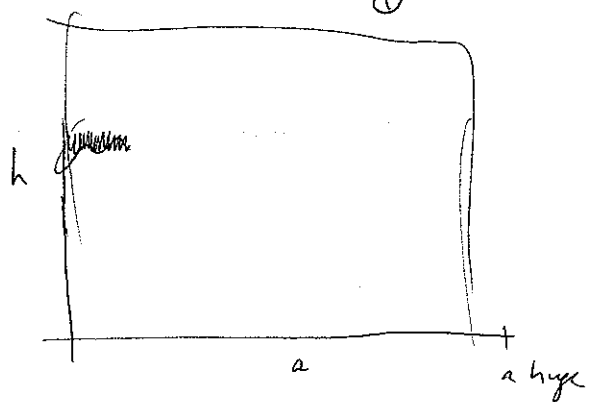
2001/03

2010-10-17

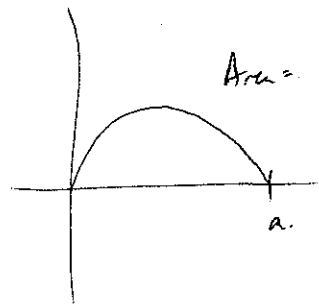
①



Perimeter = area.



If $a \leq 2$:



$$a \left(\frac{a\pi}{8} \right)$$

$$\text{Area} = \frac{1}{2} \pi \left(\frac{a}{2} \right)^2 = \frac{a^2}{8} \pi$$

$$\text{Perimeter} = a + \pi \frac{a}{2}$$

$$a \left(1 + \frac{\pi}{2} \right)$$

$$\text{Per} = 2(a+h)$$

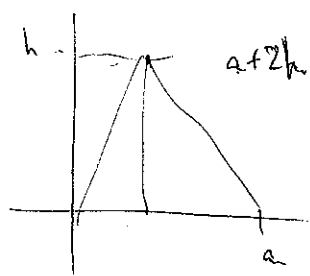
$$\text{Area} = ah$$

$$2a+2h = ah.$$

$$\frac{2a}{a-2} = h \quad \text{If } a > 2, \text{ can do.}$$

$$a \frac{\pi}{8} = 1 + \frac{\pi}{2}$$

$$a = \frac{1 + \frac{\pi}{2}}{\frac{\pi}{8}} = \frac{8}{\pi} + 4 \text{ huge}$$



$$a+2h \leq \text{Perimeter} \leq ah$$

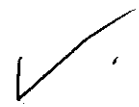
$$\text{Perimeter} = \sqrt{x^2+h^2} + \sqrt{(a-x)^2+h^2}$$

$$\text{say } 2\sqrt{\frac{a^2}{4}+h^2} \geq 2h$$

~~$a \leq 0$~~

$$2 \geq a > 0.$$

$$a+2h \geq 2h \geq ah.$$



2002/A1

2010-10-13
②

$$f. \frac{1}{x^k - 1} = \frac{1}{g.}$$

$$g(x) = x^k - 1.$$

~100 → 42 SURF
6 from extend
quality of proposal determines → only 1 per student
had Logic/philosophy

$$dr: - \frac{kx^{k-1}}{(x^k - 1)^2}$$

$$dr1: - \frac{1}{g^2} (kx^{k-1})$$

$$dr2: 2$$

$$dr2: \frac{2}{g^3} (kx^{k-1})^2 - \frac{1}{g^3} (\text{stuff})$$

$$dr3: - \frac{6}{g^4} (kx^{k-1})^3 - \frac{1}{g^3} (\text{stuff})$$

Meeting of the Minds
Reading Log May 1

$$\text{eval at 1: } n! (-k)^?$$

1997/A2

