

1.25  
2020

# Unit 1

## Class cribbles

①	1	3	5	7	9	11
	2	2	2	2	2	

②							50
f	2	5	10	17	26	37	50
Df	3	5	7	9	11	13	

	0	1	2	3	4	5	6	
f	1	2	4	8	16	32	64	128
Df	1	2	4	8	16	32	64	
D <sup>2</sup> f	1	2	4	8	16	32		

$$f(x) = 2^x$$

③

Exponential growth.

$$Df = f$$

④

Find the next

entry:

f 1 2 0 3 -1 4 -2 5

**-3**

$\Delta f$  1 -2 3 -4 5 -6 7 **-8**

$\Delta^2 f$  -3 5 -7 9 -11 ...

f 2 3 5 7 11 13 17 **19**

**5**

2

2

4

2

4

2

24?

Prime numbers

Prime  
twins

→ Project ①