$$2 + 2^2 + 2^3 + 2^4 + \ldots + 2^n = 510$$

$$2 + 4 + 8 + 16 + \ldots + 2^n = 510$$

$$2 + 4 + 8 + 16 + \underset{2^5}{32} + \underset{2^6}{64} + \underset{2^7}{128} + \underset{2^8}{256}$$

$$= 510$$

$$a_1 + a_2 = 10$$

$$a_{n+2} - a_n = 3 \rightarrow a_{3+2} - a_3 = 3$$

$$a_5 - a_3 = 3$$

$10+3+3+3+3+3+3+3+3=9$

↳ 34

$3+3+3+3+3+3+3+3=8$

↳ 24

$3+3+3+3+3+3+3+3+3=9$

↳ 27

$3+3+3+3+3+3+3+3+3+3=10$

↳ 30

$3+3+3+3+3+3+3+3+3+3=10$

↳ 30

$a_1 = 4$

$a_2 = 6$

$a_3 = 9$

$a_4 = \frac{27}{2}$

$a_5 = \frac{81}{4}$

$a_6 = \frac{243}{8}$

$$a_n = a_1 r^{n-1}$$

$$a_n = 4\left(\frac{3}{2}\right)^{n-1}$$

$$a_{40} = 4\left(\frac{3}{2}\right)^{40-1}$$

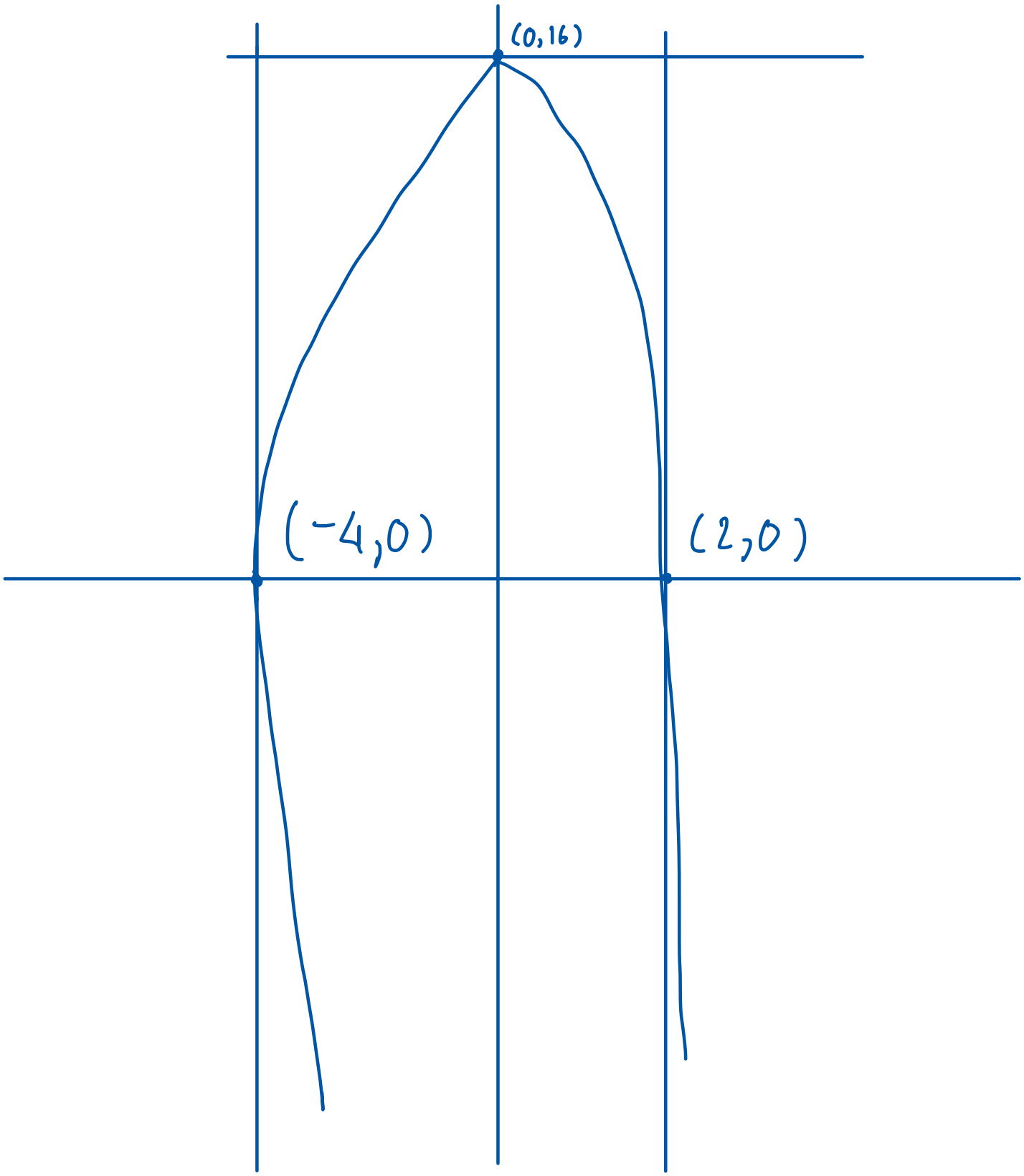
$$a_{40} = \frac{3^{39}}{2^{37}} \approx 2.94862 \times 10^{7}$$

$$\frac{(x-3)^2}{9} + \frac{(y-5)^2}{25} = 1$$

$\Rightarrow (3, 5)$

$$1 - x < -\frac{3}{7} < 7 - x$$

$$\Rightarrow \left(\frac{10}{7}, \frac{52}{7}\right)$$


(0,16)
(-4,0)
(2,0)

$$N = \frac{8}{3+1}$$

$$N = \frac{8}{4}$$

$$N = 2$$

$$x^{\log_5 x^2} = \frac{25}{x^3}$$

$$\frac{50}{800} \times 100$$

$$\frac{40}{800} \times 100 = 5$$

$$2240 - 800$$

$$= 1440$$

$$\frac{1440}{800} \times 100$$

$1020 - 800$

$= 220$

$$\frac{220}{800} \times 100$$

$n(S) = 99$

$n(E) = 10$ < .02468 / 13579

$$\frac{49}{99}$$

2 4 6 8 10 12

14 16 18 20 22

24 26 28 30 32

34 36 38 40 42

44 46 48 50 52

54 56 58 60 62

64 66 68 70 72

74 76 78 80

82 84 86 88

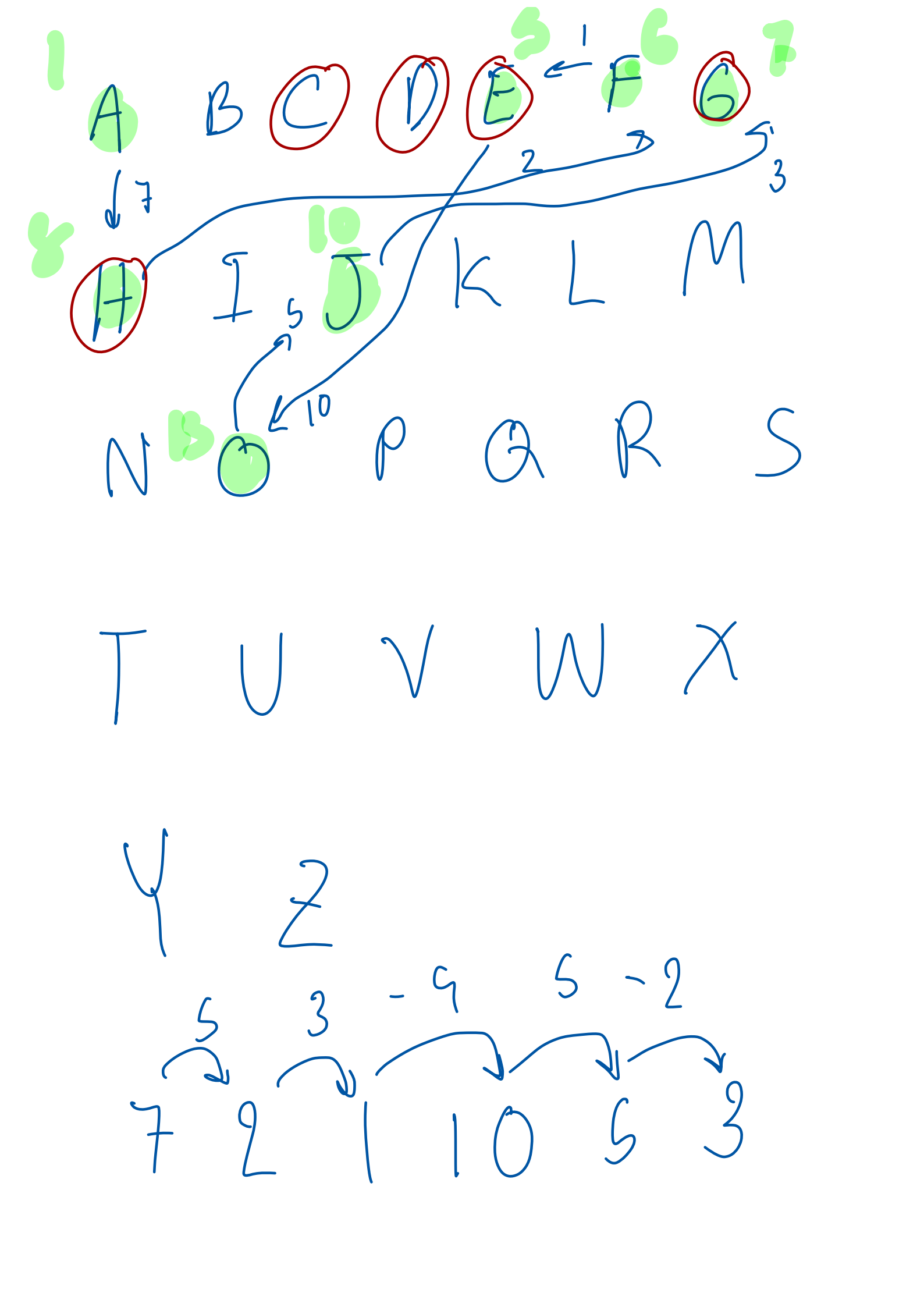
90 92 94 96

98

$(63 \times a) + (14 \times b) + C = 486$

$50 \overline{)\ 50 \quad 600}$

$1 \quad 12$


A B C D E F G
H I J K L M
N O P Q R S
T U V W X
Y Z
7 2 1 10 5 3
5 3 -9 5 -2

$$34.73 - 13.59 = 20.54$$

$$34.13 - 13.59 = 20.54$$

$$20.54 - 2.28 = 18.26$$

$$\frac{18.26}{100} \times 50000$$

6 10 18 30 46 66

4 8 12 16 20

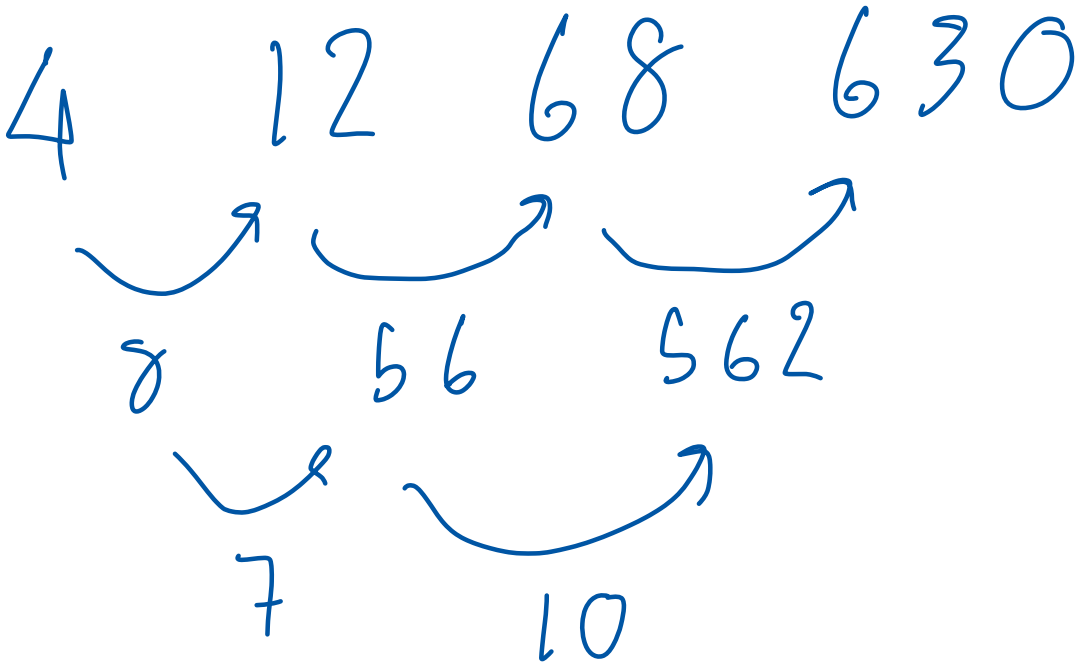
4 4 4 4

(1)

66

24 +

90



9 18 14 28 24 48

+9 −4 +14 −4 +24

1 3 7 15 31

2 4 8 16 32

×2 ×2 ×2 ×2

10 14 19 27 44

4 5 8 7 5

+1 +3 −1 −3

$$V = \frac{S}{t}$$

$$\begin{array}{r} 120 \\ \times\ 12 \\ \hline 240 \\ 120 \\ \hline \end{array}$$

$$12 = \frac{S}{120}$$

$$12(120) = S$$

$$S = 1440$$

1 2 3 4 5 6 7

E F D B G A C

$$
\begin{array}{r}
^{2}140 \\
\quad 50 \\
\hline
\quad 000 \\
7\,00 \\
\hline
7000
\end{array}
$$