

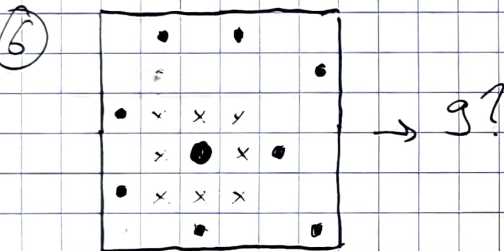
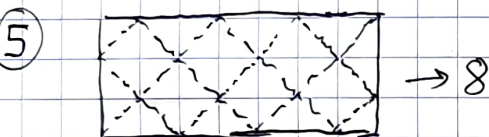
① $7 \times 7 = 8$

② $35 = 99$
 $S = 33$
 $2 + 13 + 11 + 7$

$\rightarrow 2, 7, 11$

③ $4 + 4 + 5 = 13$

④ $0 \ 1 \ 2 \ 4 \ 8$
 $0 \ 1 \ 2 \ 4 \ 9 \rightarrow 3$
 $0 \ 1 \ 2 \ 5 \ 9$
 ~~$0 \ 1 \ 3 \ 5$~~



⑧ 5×102
 4×255
 3×150
 2×425

$2550 + 425 + 300 + 765 + 408$
 $= 4448$

⑨ $B = 115 \quad 7 | A \quad S(A) = 5 \text{ ou } 23$

~~$A = 102, 109, 112, 119, 126, 133, 140$~~

$A = 105, 112, 119, 126, 133, 140$ OK
 147

Solution $140 + 115 = 255$

$B = 138 \quad 12 | A \quad S(A) | 2 \times 3 \times 23$

$A = 108, 120, 132, 144$

Solutions 258 et 270

3 solⁿ

⑩ Si $A=1$: $B=9: 19 \times 91 = 1729$ OK
 $B=8: 18 \times 81 = 1458$ OK
 $B=7: 17 \times 71 = 1207$ OK
 $B=6: 16 \times 61 = 976$ non

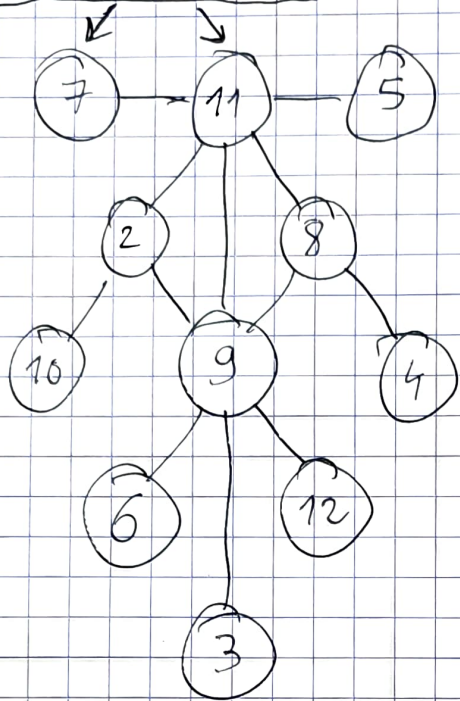
Si $A=6$: $B=2: 62 \times 26$ non
 $B=4: 64 \times 46$ non
 $B=8: 68 \times 86 = 5848$ non

3 solⁿ

$$\textcircled{7} \quad 2+3+\dots+12 = 6 \times 13 - 1 = 77$$

$$77 - 46 = 31 \quad 31 - 11 = 20$$

$$[5] \quad 18 = \underbrace{8+10}_{\downarrow} = \underbrace{7+11}_{\downarrow}$$



$$[6] \quad 17 = 8+9 = \underbrace{7+10}_{\text{imposs. car [5]}}$$

$$\Rightarrow 18 = 7+11$$

11) moy. 15

$$\begin{array}{ccc} 13 & 14 & 18 \\ 12 & 16 & 17 \end{array} \rightarrow 18$$

12) 3 WROC = 4 LAW < 4000

→ ~~3W < 4A~~ W=1

$$3 \times 1 R O C = 4 \times L A 1 \rightarrow C = 4/3$$

~~300 < 3 R O~~

$$3 \times 1 R O 8 = 4 \times L A 1 \quad L \geq 7$$

→ L = 7 ou 9

• Si L = 9, 3600 → 4000 → R = 2 ou 3

$$4A = 2 + 3O \quad [10] \quad O \text{ pair}$$

~~A = 0~~ ~~A = 1~~

A = 0 O = 6

A = 1 non

A = 2 O = 2

A = 3 O = 0

A = 5 O = 6

A = 8 imp (C)

$$3 \times 1 R 6 8 = 4 \times 9 0 1 = 3604 \text{ non}$$

$$3 \times 1 2 8 \text{ imp.}$$

$$3 \times 1. 0 8$$

$$3 \times 1 2 6 8 \quad R = 2$$

div. par 3!



3644

3684

3724

3764

3804

3924

imp.

imp.

OK

1 sol pour L = 9: 1 2 6 8 9 5 1

• Si L = 7, 2800 → 3200 → R = 0

$$3 \times 1 0 8 = 4 \times 7 A 1 \quad A \geq 6$$

$$3 | 7 A 1$$

imp.

13

		A	B	
14	12	6	15	18
16	19	13	7	10
9	8	20	17	11
		↑	C	D
		13+7=20		

$$4 \times 13 = 52 = 6 + 7 + 20 + \cancel{13}$$

$$39 - 27 = 12$$

$$52 - 36 = 16$$

$$39 - 25 = 14$$

→ 6 à 20

$$A + C = 32$$

$$B + D = 29$$

Restant 11, 15, 17, 18

$$A + C = 15 + 17$$

$$A + B = 65 - 32 = 33 = 15 + 18$$

$$B + D = 11 + 18$$

$$C + D = 65 - 37 = 28 = 11 + 17$$

→ A = 15, B = 18, C = 17, D = 11

14

$$S = \frac{10 \times 11}{2} = 55$$

$$55 - 46 = 9$$

1	.	.	3	.
9	.	.	10	.
↓	↓	↓	↓	↓
10	13	10	13	10

↳ 6+7 ou ~~5+8~~ (8 pris par 10)

$$10 = 2 + 8 \text{ ou } 4 + 6$$

$$\{6, 7\} + \{2, 8\} + \{4, 6\} = 19 \text{ impair}$$

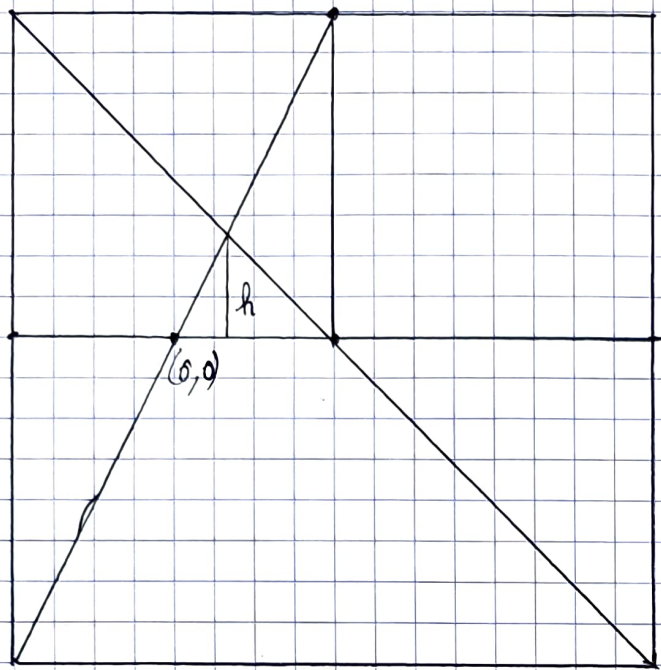
↑
impair

$$12 = 8 + 4$$

→ 2 sol^o

1	7	8	3	4
9	6	2	10	6
		↑		↑
		2 ^e sol		

15



unité = 1 carreau

$$y_1 = 2x_1$$

ou

$$y_2 = 4 - x_2$$

$$2x = 4 - x \Rightarrow x = 4/3 \text{ et } y = 8/3 = h$$

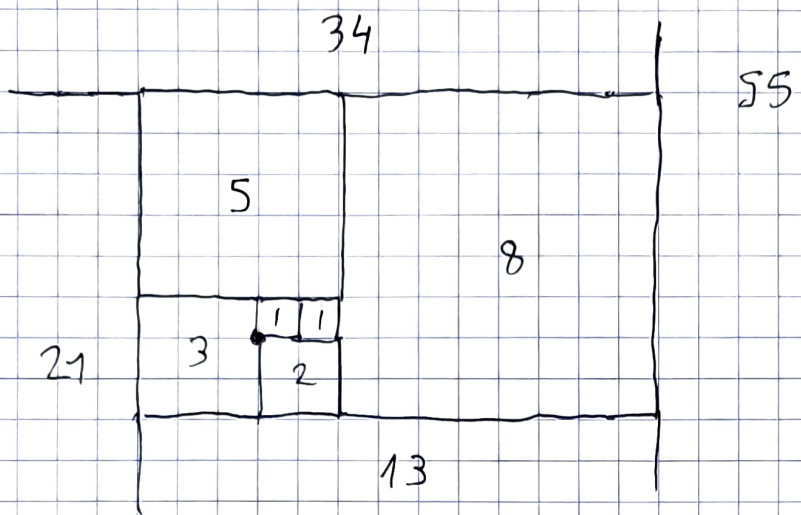
$$S_p = 4 \times \frac{8}{3} / 2 = 16/3$$

$$S_f = 16^2 = 256$$

$$S_f / S_p = 16^2 / 16 \times 3 = 48$$

$$48 \times 10 = 480 \text{ m}^2$$

17



1	1	2	3	5	8	13	21	34	55	89	144	233	377
		B	G	H	D	B	G	H	D	B	G	H	D
610	987	1597	2584	4181	6765	10946							
B	G	H	D	B	G	H							

10946 / 13 # OK

- 5: (2, 1) → (2, 6)
- 8: (2, 6) → (10, 6)
- 34: (10, 6) → (10, 40)
- 55: (10, 40) → (65, 40)
- 233: (65, 40) → (65, 273)
- 377: (65, 273) → (442, 273)
- 1597: (442, 273) → (442, 1870)
- D 2584: (442, 1870) → (3000+, 1870)
- ~~10946~~ → 10946