(5)

G ment → imp. (4)

⇒ G et M: vérité, E ment → Elane

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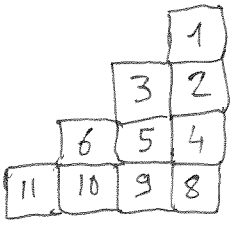
(6)



59

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(7)

~~14b1~~ # tours = 45

N = 46 + 45 = 91

---

(9)

base × h

~~x=h~~ $x^2 = 1 \times \sin\alpha$ $4x = 8$ $x = 2$

~~Pyt~~ ~~4 sin α = 1~~ ~~⇒ sin α = 1/4~~

S = ~~aire~~ $x = 2\ cm^2$

---

(10)

A: $x \times 1{,}15$ ~~$\times 1{,}08$~~ $= 287{,}5$

G: $x \times 1{,}08 \times 1{,}05 = y$

$y = 287{,}5 \times \frac{1{,}08}{1{,}15} \times 1{,}05$ ~~287,5~~

$= 2{,}5 \times 108 \times$ ~~270~~

$\times 1{,}05 = 270 \times 1{,}05 = 270 + 13{,}5$

$= 283{,}5$

(11)

Sac plein : p

Puis N : $\frac{2}{3}p \rightarrow \frac{5}{6}p \times 2$ [1600 → 2× 2000

1500 / 2000

V : $\frac{3}{4}\left(\frac{5}{6}p\right)$

$\frac{1}{4}\left(\frac{5}{6}p\right) = 500g \rightarrow p = \underline{2400g} = \underline{2{,}4\,kg}$

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(12)

$x^2 \equiv 2001\ [10000]$

$x = 10k \pm 1$

$100k^2 \pm 20k + 1 \equiv 2001$

$10k^2 \pm 2k \equiv 200\ [1000]$

$k = 5l$

$250l^2 \pm 10l \equiv 200$

$25l^2 \pm l \equiv 20\ [100]$

$l = 5m$

$5^4 m^2 \pm 5m \equiv 20$

$125m^2 \pm m \equiv 4\ [20]$

$5m^2 \pm m \equiv 4\ [20]$

$m = 1$, $l = 5$, $k = 25$, $x = \underline{249}$

$$\begin{array}{r} 249 \\ \times\ 249 \\ \hline 62001 \end{array}$$

(13)

~~S E J~~ $S < E < J$

$J - S = 4$

$S+E + E+J + S+J + S+E+J = 3(S+E+J)$

$J-E + J-S + E-S = 2(J-S) = 8$

$\frac{3}{8}(S+E+J) = J$

$\boxed{3(S+E) = 5J}$ $\quad S = J-4$

$3E - 12 = 2J$

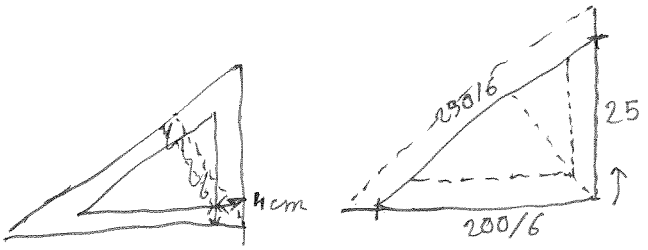
- $E = J-1 \rightarrow J - 15 = 0 \rightarrow J = \underline{15}, E = 14, S = 11$
- $E = J-2 \rightarrow J = \underline{18}, E = 16, S = 14$
- $E = J-3 \rightarrow J = \underline{21}, E = 18, S = 17$

3 sol°

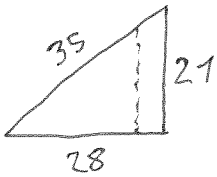
---

(14)

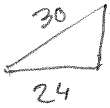
125/3
100/3
25



$h = \frac{30 \times 40}{50} = 24 \rightarrow \frac{20}{24} = \frac{5}{6} \times \frac{21}{25}$



$\times \frac{24}{28} = \frac{6}{7}$

$\rightarrow$ 

$\rightarrow \underline{72}$

1	2	3	4	5	6	7	8

0q: $\left(\frac{2}{3}\right)^8$

$\left(\frac{2}{3}+\frac{1}{3}\right)^8$

123 → 8

124 134 → 8 × 2

1q: $\left(\frac{2}{3}\right)^7 \frac{1}{3} \times 8$

2q: $\left(\frac{2}{3}\right)^6 \left(\frac{1}{3}\right)^2 \times \underbrace{\left(\frac{8\times 7}{2} - 4\right)}_{24}$

3q: $\left(\frac{2}{3}\right)^5 \left(\frac{1}{3}\right)^3 \times 24$

4q: $\left(\frac{2}{3}\right)^4 \left(\frac{1}{3}\right)^4 \times 8$

256 + 1024 + 1536 + 768 + 128 =

1280

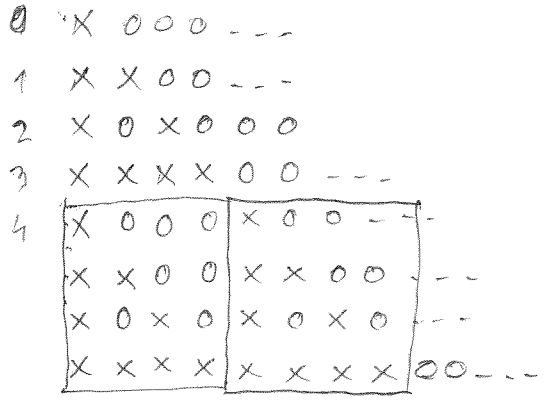
2816

3584

3712

896
2432
3456
3712

$3^8 = 729 \times 9 = 6561$



1
3
5
15
17
54

1000?

C_n^p [2]

$1000 = 1111100111 + 1$

$= 1111101\,1000$

→ 6 chiffres 1

→ $2^6 = \underline{64}$