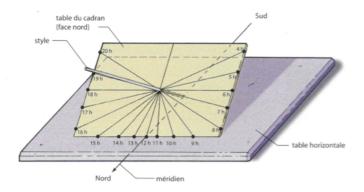
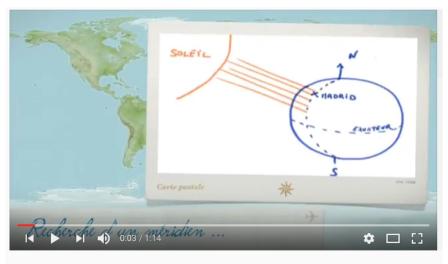
Orientation en fonction du méridien

Comme nous l'avons vu précédement le cadran solaire doit être positionné dans un axe Nord/Sud.



La vidéo ci-dessous nous rappelle comment nous avons déterminé cet axe Nord/sud



Recherche d'un méridien

https://youtu.be/KGLhs-p6wMQ

Orientation en fonction de la latitude

Pourquoi faut-il orienter le style en fonction de la latitude?

Comme l'indique la vidéo ci-dessous le style doit être orienté parallèlement à l'axe de la terre.



REMETTONS LES PENDULES A L'HEURE C'est Pas Sorcier

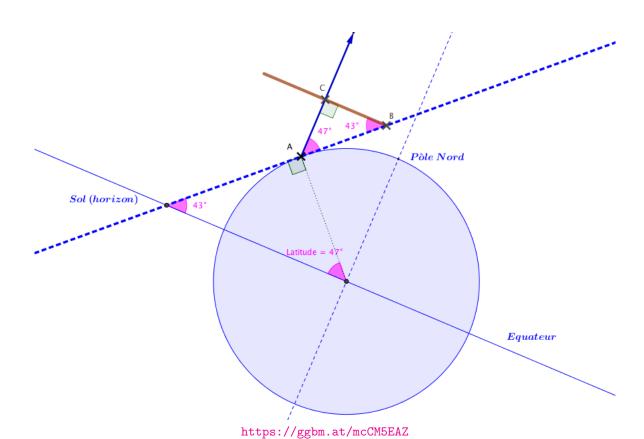
https://youtu.be/Hb4-ISZFbyM

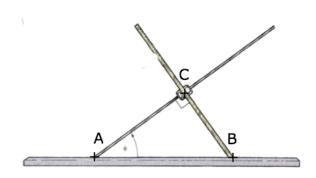
Comment orienter le style

Exercice 1

Ouvrir la figure en suivant le lien ci-dessous.

1.	Quelle co	onjecture	peut-on é	émettre cor	ncernant le	es angles di	u triangle	ABC en	fonction d	e la latitude	e du lieu ?	
2.	Démontre	er votre	conjecture	е.								

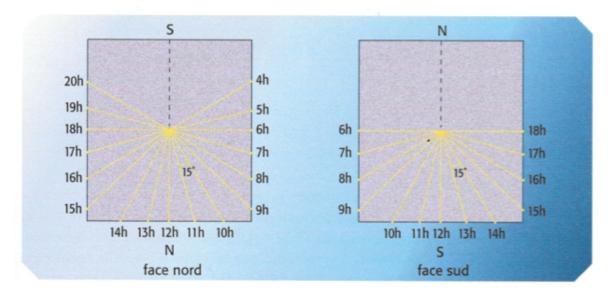




Construction

Tracé des lignes

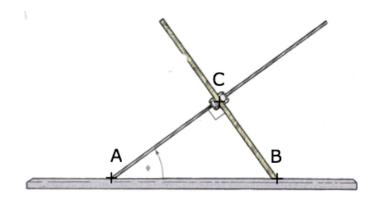
A l'aide d'un rapporteur on divise notre planche en secteurs de 15° sur les deux faces comme l'indique la figure ci-dessous. Il faut faire un tracé sur les deux faces : Face Nord pour l'ombre en été et face Sud pour l'ombre en hiver.



Position du style par rapport à la table du cadran

Exercice 2

En utilisant les informations obtenues dans l'exercice 1 positionner le style et le fixer à l'aide des écrous afin que votre cadran solaire soit parfaitement réglé pour une latitude de 40° Nord (latitude approximative du lycée).



Rappel : Lecture de l'heure légale

Une fois le cadran positionné nous savons que pour obtenir l'heure légale à partir de l'heure du cadran solaire nous devons appliquer la formule suivante :



4.3 min SGs -2 min Ss -2 min Ss -4 min Ss -6 min Ss -1 min Ss	FÉVRIER	1	MARS	AVRIL	MAI	NIDC		HILLET	AOIÎT	CEPTEMBRE	OCTOBBE	MOVEMBE	DÉCEMBBE
4 - 3 min 25 - 1 min 59 2 - 4 min 55 - 5 min 55 - 10	+13 min 32 s +12 min 17	+12 min 1	78	+3 min 50 s	-2 min 55 s	-2 min 8 s		+3min 54c	±5 min 20 e	-Umin 2e	40 min 22 e	46 min 36 m	40-1-FT
4. Sanis 144 -Janis 48 -Lamis 49 4 - Anim 129 -Lamis 48 -Lamis	+13 min 40 s +12 min 5 s	+12 min	SS	+3 min 32 s	-3 min 2s	-1 min 59s		+4min Fe	46 min 16 c	-Omin 22¢	-10 min 63 s	-10 min 20 s	-10 min 57 s
4. Ezhin 576 -Janih 1848 -Lanih 288 4-danih 288 -Lanih 288 -La	+13 min 46s +11 min 53s	+11min 5	338	+3 min 14 s	-3 min 8s	-1 min 49s		44 min 17 s	46 min 11 e	-Omin 44	-10 min 46 s	-10 min cr s	-10 min 34 s
4. Canin 40s - Jamis 19s - Limin 28s - Hamis 28s - Hamis 28s - Hamis 28s - Limin 18s	+13 min 52s +11 min 40s	+11 min 4	s 0 t	+2 min 57 s	-3 min 14s	-1 min 39s	7	-4min 27e	ASmin Se	-f min to	44 min 200	-10 min cr s	-10 mm 11 s
4. Zimin 23c - Jamin 24c - Limin 58c - Famin 45c - Jamin 24c - Limin 58c	+13 min 58s +11 min	+11min	275	+2 min 40 s	-3 min 19 s	-1 min 28s	10	+4min 38s	+6 min 0s	-1min 21e	-44 min 39 e	-10 min 26 s	-9min 4rs
4, Tamin 45s -1, Tamin 65s -1, Tamin	+14min2s +11min	+11 min	188	+2 min 22 s	-3 min 24 s	-1 min 18 s	9	+4min 48s	+5min 53s	-1min 41s	-11 min 56 e	-16 min 23 s	-Smin 25.8
6 +1min 49s -3 min 34s -0 min 35s +5 min 75s -2 min 22s -1 min 49s -1 min 49s -1 min 49s -1 min 49s -1 min 45s -1 min 55s -1 min 45s	+14min 5s +10mir	+10 mir	158s	+2min6s	-3 min 28 s	-1min 6s	2	+4 min 58 s	+5 min 46 c	-2 min 2 s	-12 min 13 e	16 min 45 c	omin 24 o
6 +1min 33 -3 min 34s -0 min 43s 9 +5 min 32s -2 min 34s -1 min 43s -1 min 43s <th< td=""><td>+14min8s +10mir</td><td>+10 mir</td><td>1448</td><td>+1 min 49s</td><td>-3 min 31 s</td><td>-0 min 55 s</td><td>. 00</td><td>+5min 7s</td><td>45 min 38e</td><td>_2min 22e</td><td>-12 min 20 a</td><td>-Tomin 15 S</td><td>-6 min 31 S</td></th<>	+14min8s +10mir	+10 mir	1448	+1 min 49s	-3 min 31 s	-0 min 55 s	. 00	+5min 7s	45 min 38e	_2min 22e	-12 min 20 a	-Tomin 15 S	-6 min 31 S
6 +1 min 15 -3 min 38 -0 min 31 +5 min 24 +5 min 24 -5 min 48 -1 min 18 -1 min	+14min 10s +10mir	+10 mir	1298	+1 min 33 s	-3 min 34 s	-0 min 43 s	01	+5 min 16s	+5 min 30s	_2min 43e	-12 min 45 p	-10 min 10 s	-0mm 55
+1min 1s -3min 38s -0min 1ss +5min 1ss +5min 1ss -1min 1ss <th< td=""><td>+14min 11s +10mi</td><td>+10mi</td><td>n 13s</td><td>+1 min 16 s</td><td>-3 min 36 s</td><td>-0 min 31 s</td><td>10</td><td>+5min 24s</td><td>+5min 21e</td><td>-3min 4e</td><td>-12 min 2c</td><td>STI HIMINOT-</td><td>7 10 44</td></th<>	+14min 11s +10mi	+10mi	n 13s	+1 min 16 s	-3 min 36 s	-0 min 31 s	10	+5min 24s	+5min 21e	-3min 4e	-12 min 2c	STI HIMINOT-	7 10 44
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+Omin 30s -Jamin 40s +Omin 6s 13 +Smin 45s +4min 51s -Jamin 40s +1min 6s -Jamin 40s +Omin 13s +Smin 43s -Jamin 40s	+14min 12s +9mir	+9mir	1428	+0 min 45 s	-3 min 39 s	-0 min 7 s	12	+5 min 40s	+5min 1s	-3min 46e	-12 min 22 e	-13 min 59 s	-0 mm 448
+Omin 15s -Omin 40s +Omin 18s 14 +5min 54s +4min 39s -4min 39s -14min 34s -15min 34s -14min 35s	+14min 10s +9mi	+9mi	n 26 s	+0 min 30 s	-3 min 40 s	+0 min 6 s	13	+5min 47s	+4min 51 s	-4min 8c	-13 min 48 e	-15 min 31 s	-0 min 49.5
+ Omin 0s -3 min 39s + Omin 31s + 5 min 0s + 4 min 28s -4 min 50s -14 min 15s -15 min 15s <th< td=""><td>+14 min 9s +9 m</td><td>+9m</td><td>in 9s</td><td>+0 min 15s</td><td>-3 min 40 s</td><td>+0 min 18 s</td><td>14</td><td>+5min 54s</td><td>+4min 39s</td><td>-4min 29c</td><td>-14min 2e</td><td>-15 min 34e</td><td>Emin 40s</td></th<>	+14 min 9s +9 m	+9m	in 9s	+0 min 15s	-3 min 40 s	+0 min 18 s	14	+5min 54s	+4min 39s	-4min 29c	-14min 2e	-15 min 34e	Emin 40s
-Omin 14s -3 min 38s +0 min 44s 16 +6 min 6s +4 min 15s -5 min 2s -15 min 15s -14 min 15s	+14min 6s +8mi	+8mi	n 52s	+0 min 0s	-3 min 39 s	+0 min 31 s	15	+6 min 0s	+4min 28e	-4min 50e	- 44 min 45 a	45 min 34 s	Ser IIIII F
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Omlo 41s -3 min 34s +1 min 10s 18 +6 min 16s -5 min 55s -14 min 52s -14 min 40s -0 min 54s -3 min 31s +1 min 72s 19 +6 min 20s +3 min 36s -5 min 55s -14 min 52s -14 min 36s -1 min 7s -3 min 24s +1 min 36s 20 +6 min 23s +3 min 24s -15 min 4s -14 min 25s -1 min 13s -3 min 14s +1 min 36s 21 +6 min 20s +2 min 20s -15 min 24s -14 min 22s -1 min 14s +2 min 24s +1 min 42s -2 min 50s -2 min 50s -15 min 24s -14 min 25s -1 min 42s -3 min 14s +2 min 28s 22 +6 min 20s -7 min 41s -15 min 24s -14 min 25s -1 min 42s +2 min 42s +6 min 30s +2 min 50s -15 min 30s -15 min 32s -13 min 35s -2 min 35 -2 min 35s +2 min 32s -2 min 44s -15 min 45s -12 min 45s -12 min 45s -2 min 35s -2 min 35s +2 min 32s -4 min 35s -16 min 35s -16 min 35s	+13 min 59 s +8 m	+8m	in 18s	-0 min 28 s	-3min 36s	+0 min 57 s	17	+6 min 11s	+4 min 3s	-5min 33s	-14min 41e	-15min 2e	Smin C1s
-Omlo 54s -3min 31s +1min 23s +6min 20s +3min 36s -6min 16s -15min 4s -14min 36s -1 min 7s -3min 28s +1 min 36s +6 min 23s +3 min 21s -6 min 37s -15 min 4s -14 min 22s -1 min 42s -3 min 24s +1 min 48s 21 +6 min 25s +3 min 7s -15 min 24s -14 min 22s -1 min 42s -3 min 14s +2 min 15s 22 +6 min 28s +2 min 50s -15 min 3s -13 min 3s -1 min 42s -3 min 42s +2 min 58s 24 +6 min 32s +7 min 41s -15 min 50s -13 min 3s -2 min 53s -3 min 3s +2 min 58s 24 +6 min 32s +2 min 3s -15 min 4s -15 min 5s -13 min 9s -2 min 53s -2 min 58s +2 min 3s +2 min 3s +4 min 3s -16 min 3s -16 min 9s -12 min 4s -2 min 3s -2 min 5s +3 min 6s 25 +6 min 32s +1 min 4s -16 min 4s -16 min 5s -2 min 4s -2 min 5s +3 min 6s 25 +6 mi		+8#	inis	-0 min 41s	-3 min 34 s	+1 min 10 s	18	+6 min 16 s	+3 min 49 s	-5min 55s	-14 min 52 s	-14 min 49 s	-3 min 22 e
-1 min 7s -3 min 28s +1 min 36s 20 +6 min 23s +3 min 21s -6 min 37s -15 min 14s -14 min 22s -1 min 49s -3 min 24s +1 min 48s 21 +6 min 25s +3 min 75s -15 min 14s -14 min 22s -1 min 42s -3 min 14s +2 min 2s 22 +6 min 29s +2 min 50s -15 min 3s -14 min 7s -1 min 42s -3 min 14s +2 min 15s 23 +6 min 30s +2 min 50s -15 min 3s -13 min 3s -1 min 53s -3 min 9s +2 min 15s 24 +6 min 32s +7 min 41s -15 min 42s -13 min 9s -2 min 53s -2 min 57s +2 min 3c +2 min 3c +2 min 3c -15 min 50s -13 min 9s -2 min 50s +3 min 6s 25 +6 min 32s +1 min 47s -16 min 3s -12 min 41s -2 min 50s +3 min 6s 27 +6 min 32s +1 min 47s -16 min 48 -16 min 48 -2 min 40s -2 min 42s +6 min 32s +1 min 45s -16 min 4s -16 min 5s -17 min 4s <td></td> <td>+7 mi</td> <td>n 43s</td> <td>-0 min 54 s</td> <td>-3 min 31 s</td> <td>+1 min 23 s</td> <td>19</td> <td>+6 min 20s</td> <td>+3min 36s</td> <td>-6 min 16 s</td> <td>-15min 4e</td> <td>-14 min 36 e</td> <td>-2min E2e</td>		+7 mi	n 43s	-0 min 54 s	-3 min 31 s	+1 min 23 s	19	+6 min 20s	+3min 36s	-6 min 16 s	-15min 4e	-14 min 36 e	-2min E2e
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s —2 min 48s —2 min 26s +3 min 42s 30 +6 min 27s +0 min 35s —10 min 4s —16 min 21s —11 min 19s +2 min 18s 31 +6 min 24s +0 min 17s —46 min	+4mi	+4 mi	n 43s	-2 min 40 s	-2 min 35 s	+3 min 31 s	20	45 min 20e	- Dmin Ede	Omin 440	- TO IIIII 148	-12 min 25	+1 min 358
-2 min 18s 31 +6 min 24e +0 min 47e -10 min 45 -11 min 19s -11 min 19s -12 min 18s -13 min 19s -13 min	+4mi	+4mi	n 25s	-2 min 48 s	-2 min 26 s	+3 min 42 s	3 %	45 min 27e	-0 min 35e	-Similares	-16 min 10 S	-11 min 41 s	+2 min 4 s
The state of the s	+4mi	+4mi	n7s		-2 min 18 s		3	+6 min 24 c	+Omin 17e	- THE	45 1 24	207 77-	+cmin 335