

Paper Reference(s) 1AS0/01
Pearson Edexcel Level 1/Level 2 GCSE
(9–1)

Astronomy
PAPER 1: Naked-eye Astronomy

Wednesday 12 June 2024 – Morning

Time: 1 hour 45 minutes

Diagram Booklet

**THIS DIAGRAM BOOKLET MUST BE
RETURNED WITH THE QUESTION PAPER
AT THE END OF THE EXAMINATION.**

**In the boxes below, write your name, centre
number and candidate number.**

Surname					
Other names					
Centre Number					
Candidate Number					

INSTRUCTIONS

There may be spare copies of some diagrams in case you need them.

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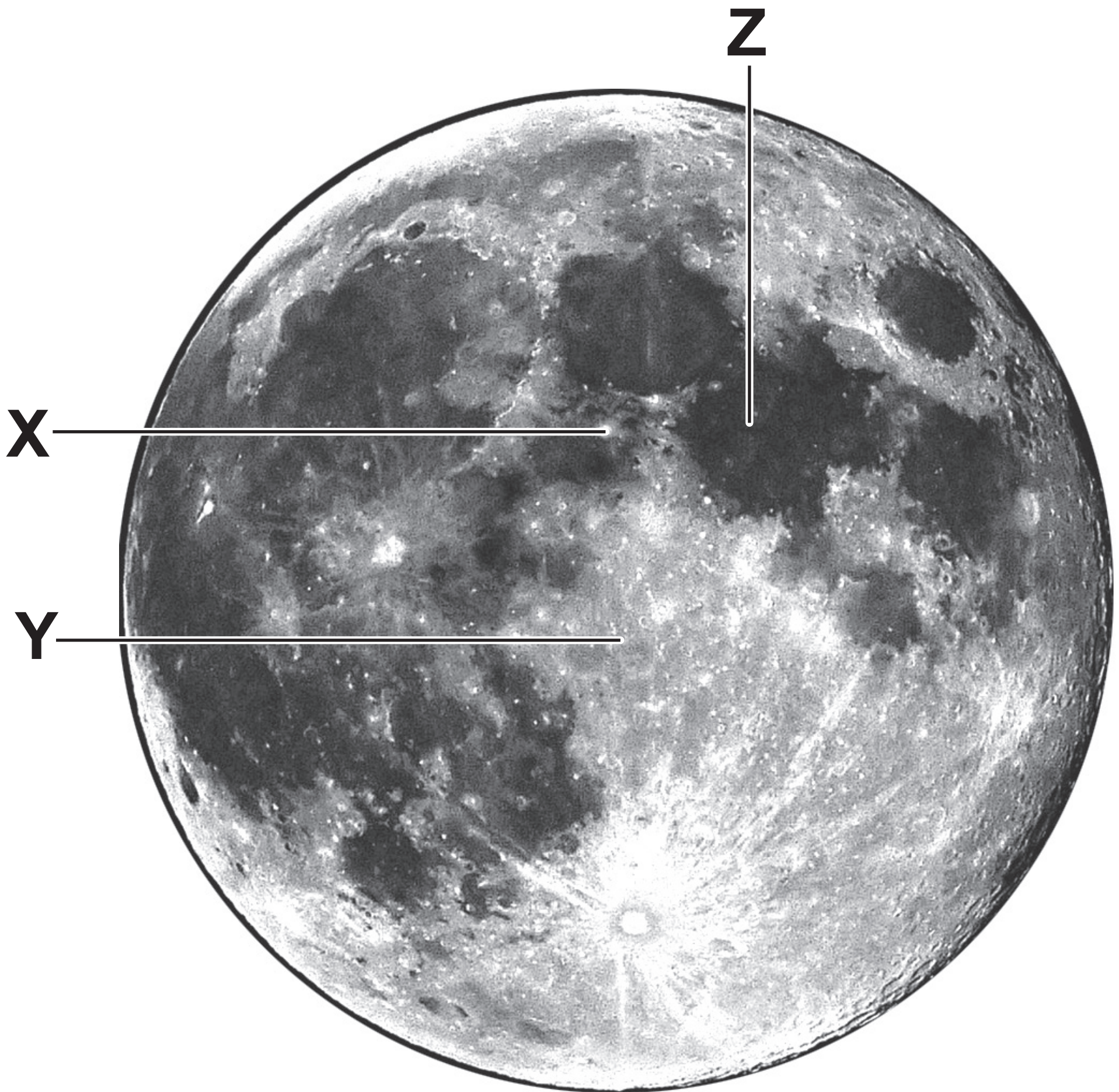
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Question 1(a)

FIGURE 1 – image of the full Moon



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Question 1(a) continued.

FIGURE 1 – line drawing of the full Moon

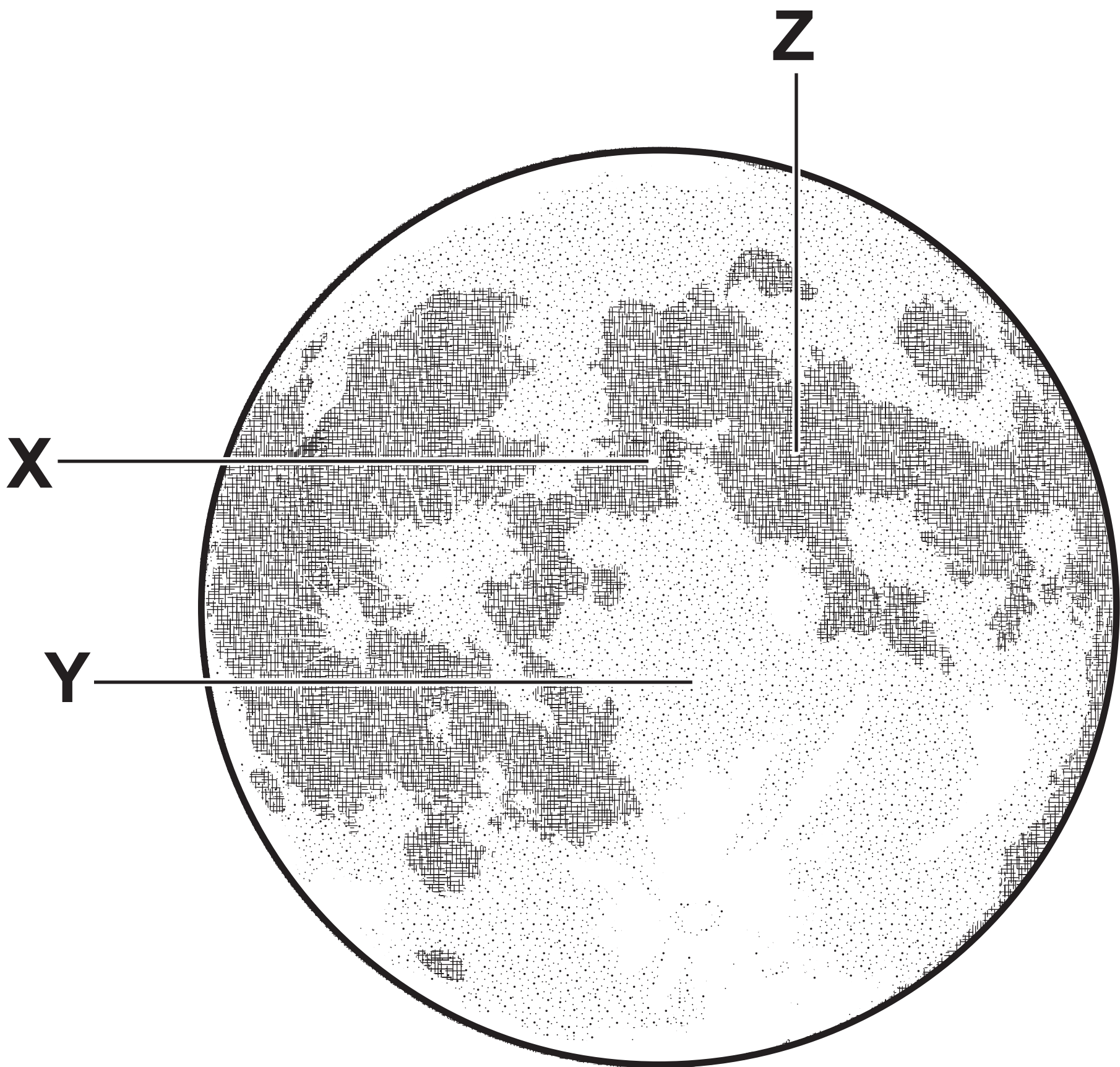
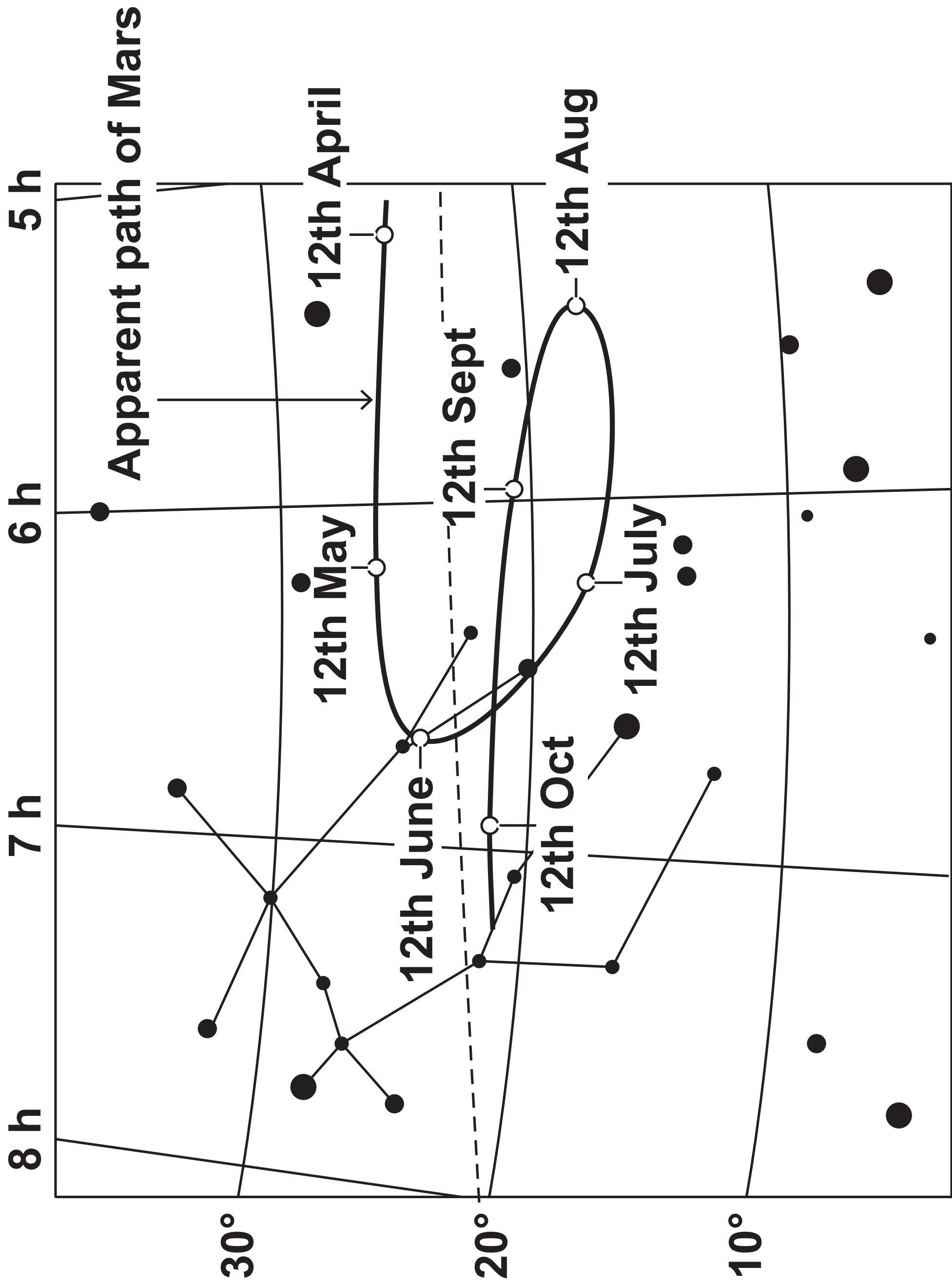


FIGURE 2



Question 4(c) – Blank

Question 5(a)

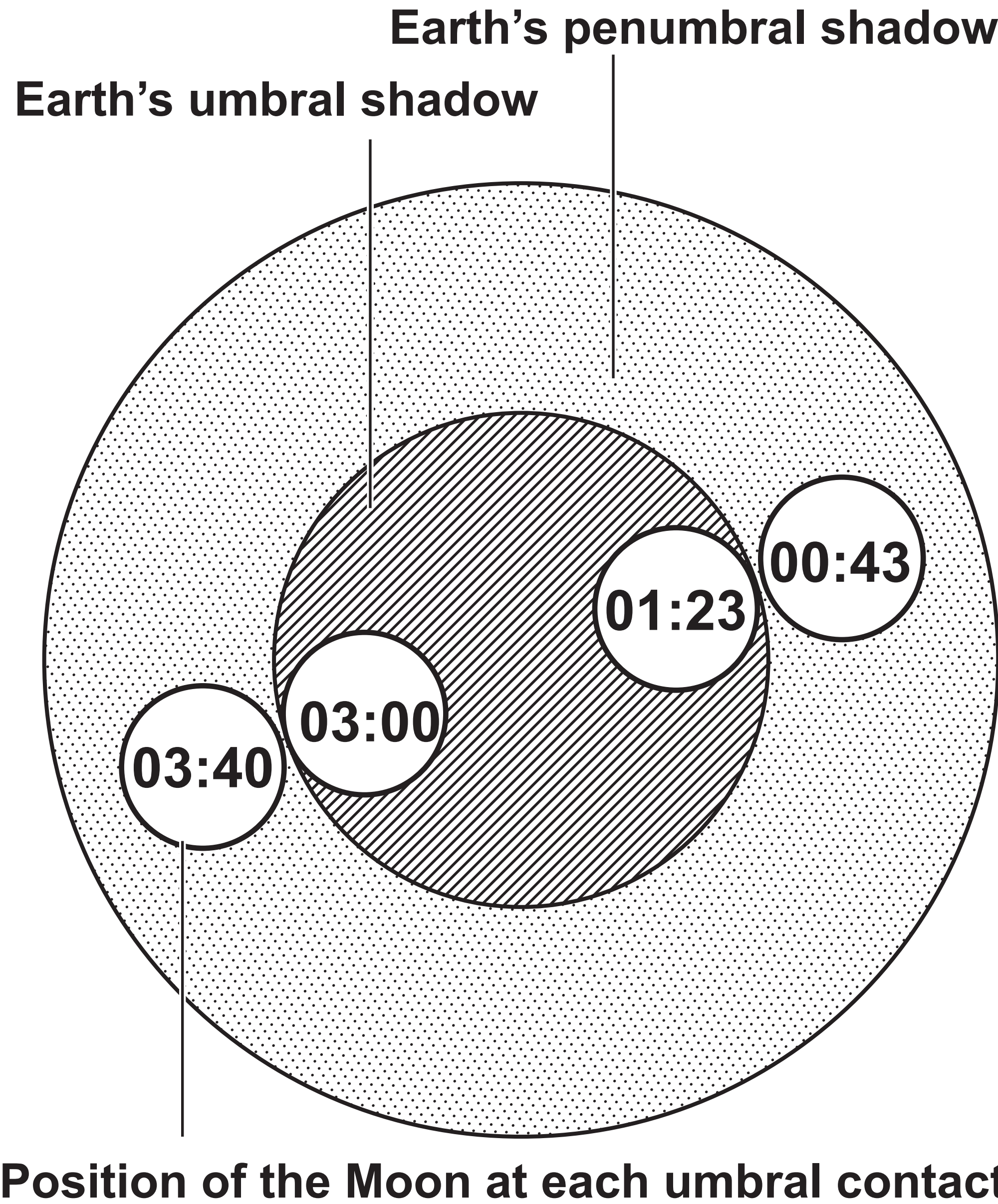
TABLE 1

Date	Level of water (m)			
	First high tide	First low tide	Second high tide	Second low tide
19 Oct	5·3	1·9	5·2	2·0
21 Oct	4·9	2·3	4·9	2·4
23 Oct	4·6	2·5	4·7	2·5
25 Oct	4·9	2·4	5·0	2·3
27 Oct	5·3	2·0	5·4	1·9
29 Oct	5·6	1·8	5·6	1·7
31 Oct	5·5	1·8	5·3	2·0

Question 5(a)(i) – Blank

Question 5(b)

FIGURE 3



Question 6(b) – Blank

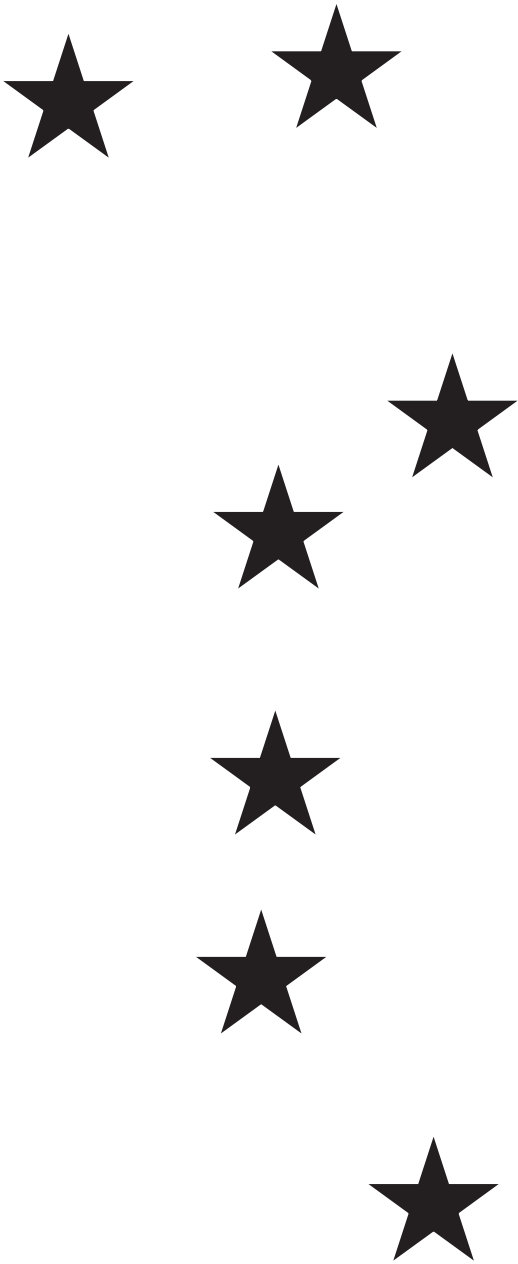
Question 6(c)

TABLE 2

Moon of Jupiter	Mean orbital radius (million km)	Orbital period (days)
Io	0·422	1·76
Europa	0·670	3·52
Ganymede	1·075	

Question 7(a)

FIGURE 4

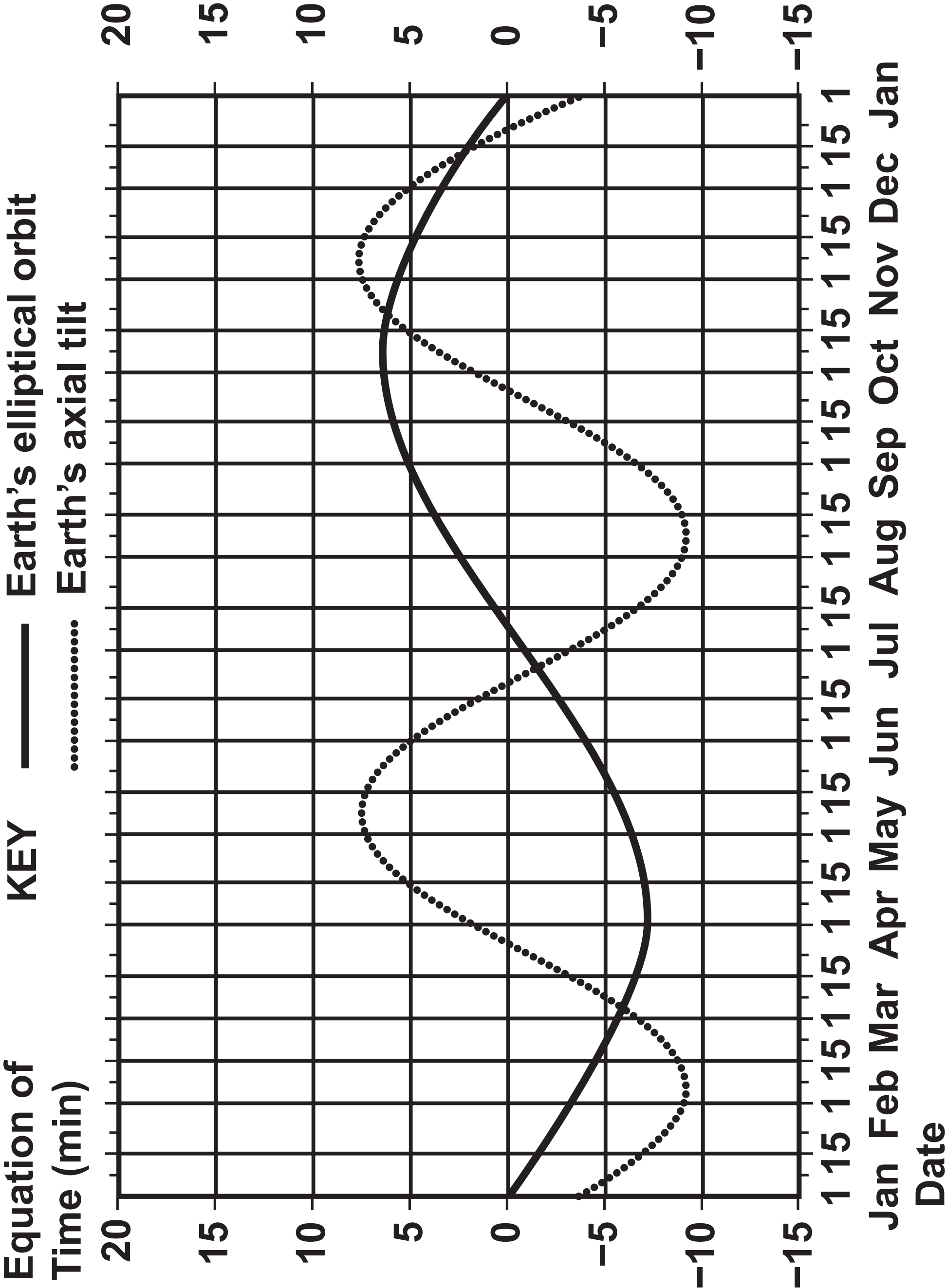


Question 7(b)

TABLE 3

Date	Duration of observation (seconds)	Number of times Polaris was observed to twinkle
10th March	25	12
11th March	15	8
12th March	30	20
13th March	20	17

FIGURE 6



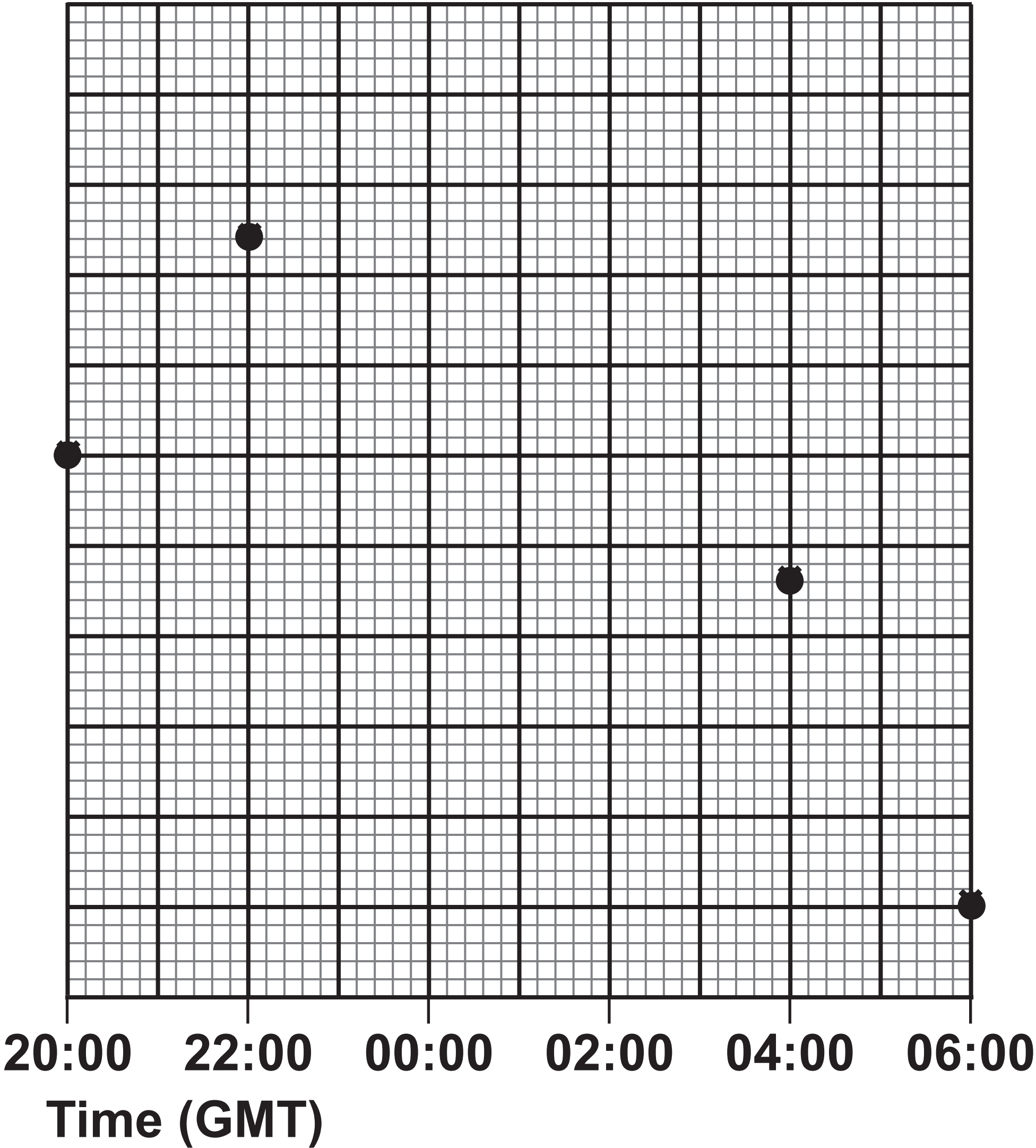
Question 10

TABLE 4

Time (GMT)	Altitude of star A (°)
20:00	40
22:00	52
00:00	55
02:00	48
04:00	33
06:00	15

FIGURE 7

Altitude of star (°)

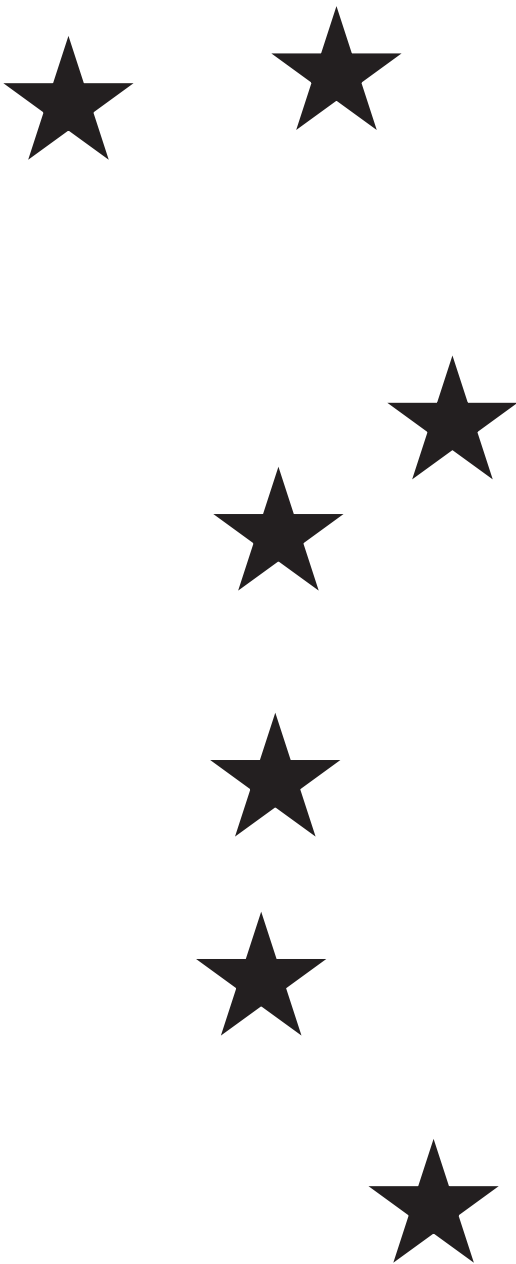


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FIGURE 4



Question 10

FIGURE 7

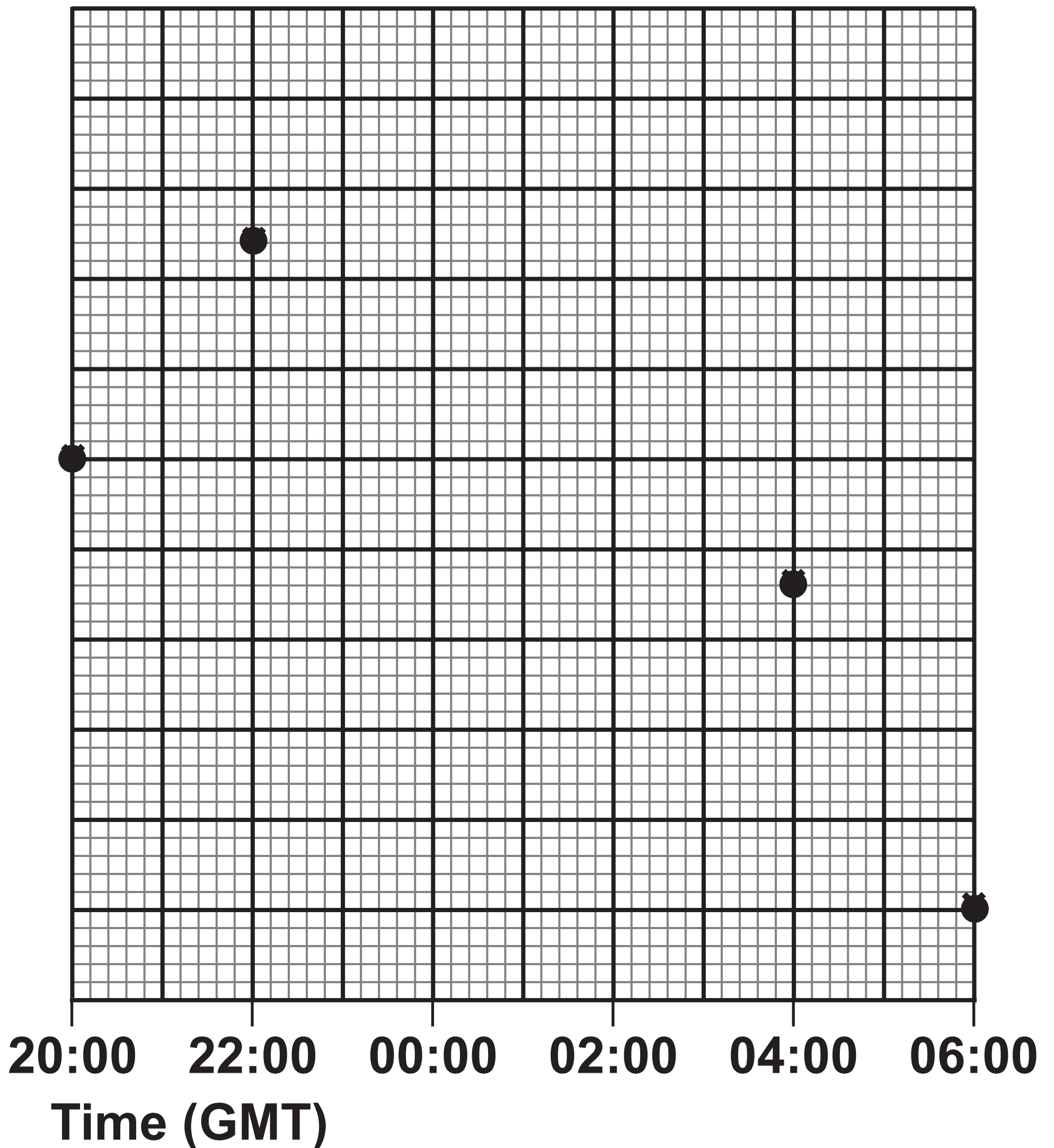
Altitude of star ($^{\circ}$)

IMAGE CREDITS

Figure 5 – Source adapted from: © Dominic Ford 2011–2024. Taken from in-the-sky.org.