

Question No 5 PLE 2023.

Qn. A training for scouts' started on a Wednesday and took 30 days. Find the day of the week on which the training ended.

Note the following before answering the question.

» Since the training STARTED on Wednesday, It means Wednesday was part of the 30 days the training lasted.

» So after Wednesday (first day of the training), the training would last for more 29 days.

## Solution

### Approach 1

Wednesday + 29 = - (finite 7) ✓ m

First day of the training

The remaining days after

$$\begin{aligned} 3 + 29 &= - (\text{finite } 7) \\ 32 &= - (\text{finite } 7), \\ 32 \div 7 &= 4 \text{ rem. } 4 \end{aligned}$$

Take the remainder 4 to be your answer

4 stands for Thursday

∴ The training ended on Thursday ✓ A



## Approach 2

The day the training started.

Sun	Mon	Tue	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

We count  
30 days  
starting from  
Wednesday

The training ended  
on Thursday.

∴ The training ended on Thursday.

Another Question involving  
"will it be".

Qn. Today is Wednesday. What day  
of the week will it be after  
30 days.

Note the following

» From the question, We are to  
count 30 days (AFTER) Wednesday,  
so Wednesday is not part of  
the 30 days because the 30 days  
come after it.



## Approach 1

$$\text{Wed} + 30 = - (\text{finite } 7)$$

The 30 days after  
(Wednesday)

$$3 + 30 = - (\text{finite } 7)$$

$$33 \div 7 = 4 \text{ rem. } 5$$

Take 5 as your  
answer since it's  
the remainder.

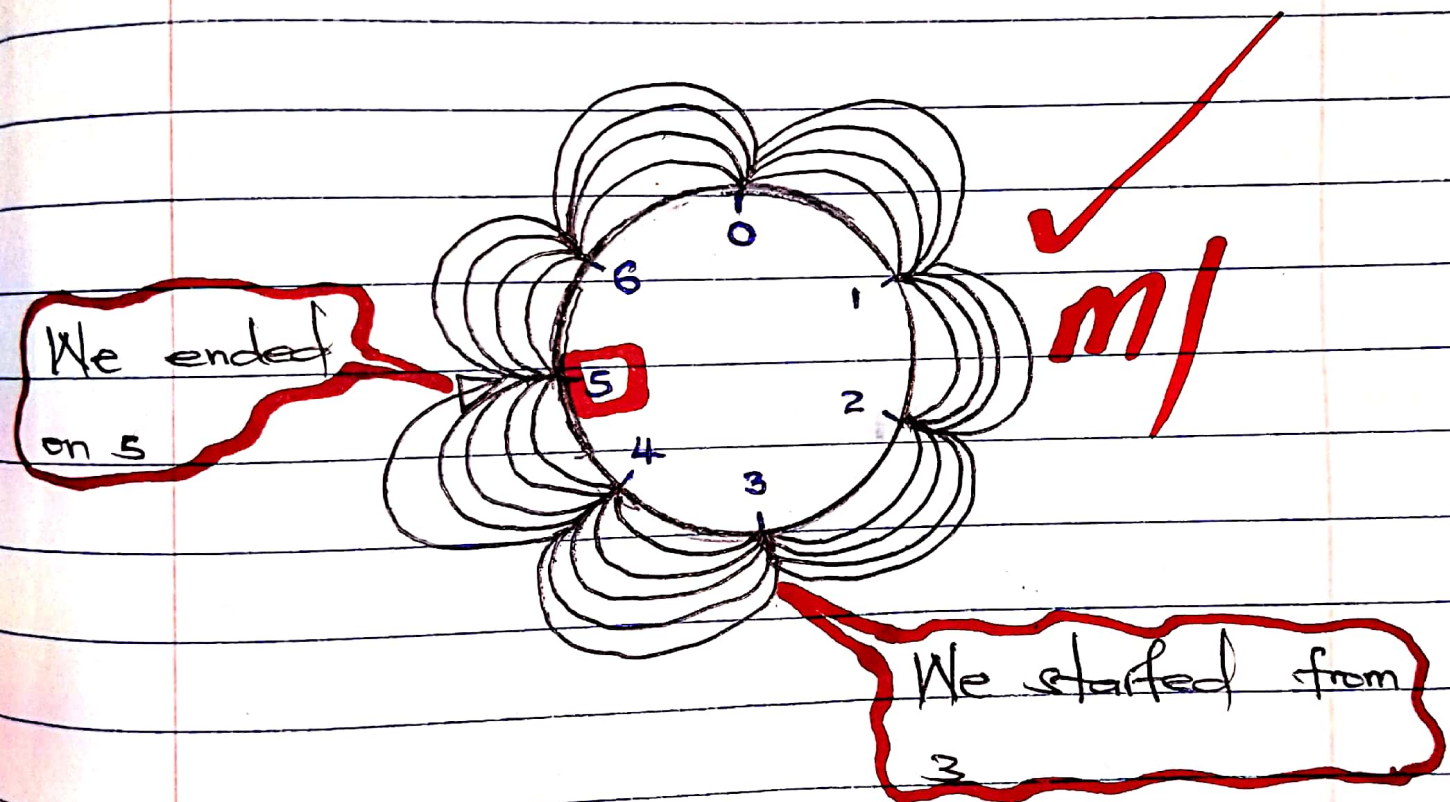
$$3 + 30 = 5 (\text{finite } 7)$$

5 stands for Friday,

Therefore, Friday will be the  
day

## Approach 2

Note, We can also use dial method as seen below.



5 stands for Friday,

Therefore, Friday will be the day.

✓ A



### Approach 3.

We start counting from Thursday since it's the first day that comes after Wednesday.

Sun	Mon	Tue	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

We count 30 days from Thursday.

Friday will be the 30th day.

Note: when the question involves "After", We directly add the days to the mentioned day of the week.

Therefore, Friday will be the day.

## Questions involving "was it or not"

Qn. 1

Today is ~~W~~

The scouts' training that lasted  
for 30 days ended on Thursday.

On what day of the week did  
it start?

Note the following

→ This question is the opposite of  
Number 5 PLE 2023.

→ We should include Thursday  
since it's part of the 30 days  
the training lasted

→ Before Thursday which is the  
last day of the training, the training  
had lasted for 29 days



Solution

last day of  
the training

We subtract 29 days  
before Thursday

$$\text{Thursday} - 29 = \text{--- (finite 7)}$$

$$4 - 29 = \text{--- (finite 7)}$$

$$4 - (29 \div 7) = \text{--- (finite 7)}$$

$$4 - (4 \text{ rem. } 1) = \text{--- (finite 7)}$$

$$4 - 1 = 3 \text{ (finite 7)}$$

3 stands for Wednesday

$\therefore$  Wednesday was the day the training started.

Try other related approaches but considering Thursday being part of the 30 days the training lasted.

## Last Example.

Qn. Today is Wednesday what day of the week was it 30 days ago.

Note: Since the word "ago" appears in the question, We are to count 30 days before Wednesday.

### Solution

$$\text{Wed.} - 30 = - (\text{finite } 7)$$

$$3 - 30 = - (\text{finite } 7).$$

$$3 - (30 \div 7) = - (\text{finite } 7).$$

$$3 - (4 \text{ rem } 2) = - (\text{finite } 7).$$

$$3 - 2 = 1 (\text{finite } 7)$$

1 stands for Monday.

$\therefore$  Monday was the day.

Note: Try related approaches too.