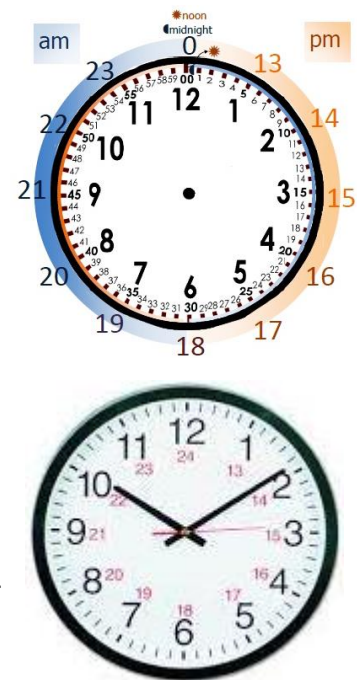


24-Hour Clock Time

Introduction

- The 24-hour clock is used to show time in a full day without using A.M. or P.M.
- It starts at 00:00 hours (midnight) and ends at 23:59 hours (just before next midnight)
- From 00:00 to 11:59, the time is the same as in the 12-hour clock A.M.
- From 12:00 to 23:59, the time is the same as P.M. but shown in full form
- To convert 12-hour time to 24-hour time, add 12 to the hour part after 12 noon
- For example, 2:00 P.M. becomes 14:00 in 24-hour format
- Midnight is written as 00:00, and noon is written as 12:00



Examples with Solutions

Example: Convert 4:00 P.M. to 24-hour clock time

✓ 4:00 P.M. is after 12 noon, so $4 + 12 = 16$

Answer: 16:00 hours

Example: Convert 7:30 A.M. to 24-hour clock time

✓ It is before 12 noon, so time remains the same

Answer: 07:30 hours

Example: Convert 12:00 noon to 24-hour clock time

✓ Noon is exactly 12:00 in both formats

Answer: 12:00 hours

Example: Convert 12:00 midnight to 24-hour clock time

✓ Midnight is the start of a new day

Answer: 00:00 hours



Example: Convert 9:45 P.M. to 24-hour clock time

✓ 9:45 P.M. means $9 + 12 = 21$

Answer: 21:45 hours

Summary Points

- 24-hour clock shows time without A.M. or P.M.
- 00:00 = Midnight and 12:00 = Noon
- For time after noon, add 12 to the hour part.
- 24-hour time helps avoid confusion between morning and evening.
- It is commonly used in railways, airports, hospitals, and military.