TIME

Time is a big part of our everyday lives! It helps us plan what we do, keep our schedules on track, and remember special moments. Learning about time lets us answer fun and useful questions like:

- What time does my favorite movie start?
- How long will it take to drive to the beach?
- When is the next school holiday?
- When did dinosaurs roam the Earth?

A UNITS OF TIME

A *unit of time* is a way to measure how long something takes. We use different units depending on what we're timing!

Definition Common Units of Time

Here are the units we use most often:

- Seconds (s) – for quick things, like a race.
- Minutes (min) – for short activities, like a break.
- Hours (h) – for longer events, like school.
- Days (d) – for full days, like a weekend.
- Weeks (wk) – for several days, like a vacation.
- Months (mo) – for parts of a year, like summer.
- Years (yr) – for long periods, like your age.

Ex: Which unit of time would you use to measure how long it takes to run 100 meters?

Answer: We use seconds because running 100 meters is a quick event.
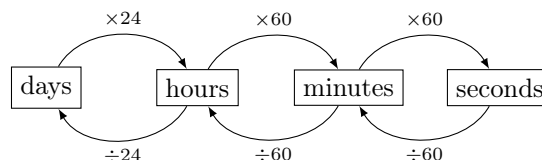So, the unit is **seconds (s)**.

B CONVERTING UNITS OF TIME

Definition Converting Units of Time

To change between units of time, use these facts:

- 1 minute = 60 seconds
- 1 hour = 60 minutes
- 1 day = 24 hours
- 1 week = 7 days

This chart shows how to convert:

Method How to Convert

- Use **multiplication** to go from a bigger unit to a smaller one (like minutes to seconds).
- Use **division** to go from a smaller unit to a bigger one (like minutes to hours).

Ex: Convert 2 minutes to seconds.

Answer: Since 1 minute = 60 seconds:

$$2\,\text{min} = 2 \times 60\,\text{s}$$
$$= 120\,\text{s}$$

So, 2 minutes is 120 seconds.

Ex: Convert 120 seconds to minutes.

Answer: Since 1 minute = 60 seconds:

$$120\,\text{s} = 120 \div 60\,\text{min}$$
$$= 2\,\text{min}$$

So, 120 seconds is 2 minutes.

C CONVERTING 1 UNIT INTO 2 UNITS

Method **Converting Seconds to Minutes and Seconds**

To change seconds into minutes and seconds, divide the total seconds by 60, because 1 minute equals 60 seconds. The number of whole minutes is how many times 60 fits, and any seconds left over stay as seconds.

Ex: You run a race in 140 seconds. How many minutes and seconds is that?

Answer:

- One minute is 60 seconds. Divide 140 by 60 to find the minutes.

- Divide:

$$
\begin{array}{r}
2 \\
60\,\overline{)\,140} \\
120 \\
\hline
20
\end{array}
$$

- You get 2 minutes, and 20 seconds are left over.
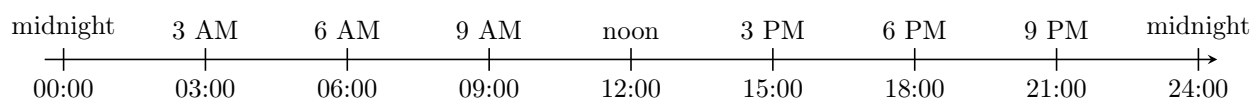
- So, 140 seconds is 2 minutes and 20 seconds:

$$140\,\text{s} = (2 \times 60\,\text{s}) + 20\,\text{s}$$
$$= 2\,\text{min} + 20\,\text{s}$$

So, you ran for 2 minutes and 20 seconds.

D 24-HOUR TIME FORMAT

Definition **24-Hour Time Format**

The **24-hour time format** is a way to tell time without using AM or PM. It counts all 24 hours in a day, from 00:00 (midnight) to 23:59 (almost midnight again).

midnight	3 AM	6 AM	9 AM	noon	3 PM	6 PM	9 PM	midnight
00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00	24:00

Ex: Write 6:15 PM in 24-hour time.

Answer: Since 6:15 PM is 6 hours after noon (12:00):

$$6:15\,\text{PM} = 12\,\text{h} + 6\,\text{h} + 15\,\text{min}$$
$$= 18\,\text{h} + 15\,\text{min}$$
$$= 18:15$$

So, 6:15 PM is 18:15 in 24-hour time.

E READING CLOCK TIMES

Method **Reading Clock**

- **Hours**: The little hand points to the hour. Look at the number it's on. If it's between two numbers, choose the smaller one.
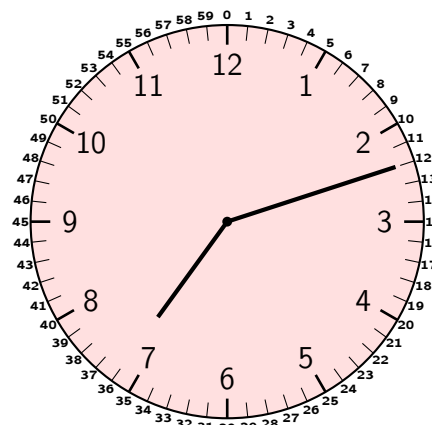
- **Minutes (by 5s)**: The big hand points to the minutes. Look at the number it's on. Each number means 5 minutes. For example: 1 is 5 minutes, 2 is 10 minutes, 3 is 15 minutes, ..., 12 is 0 minutes (o'clock).

- **Minutes (by 1s)**: If the big hand points between numbers, count each small mark after the number. Each mark is 1 minute.

Ex:
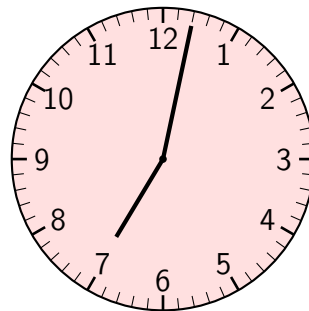
Morning

Answer:

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- The little hand is past the 7 but not yet at the 8, so the hour is 7.

- The big hand is between the 2 and 3. The 2 means $2 \times 5 = 10$ minutes. Count 2 more marks after the 2: each mark is 1 minute, so 2 marks add 2 minutes.

- Add: 10 minutes + 2 minutes = 12 minutes.

- It's morning, so the time is **7:12 AM**.