Time

Learning Objective: To convert between 12 and 24 hour time

Click the video below to begin

https://drive.google.com/file/d/1R1iap0d70wiWB-Y3a5B89EPqf2d_Ni3g/view

Warm Up

Watch the video below to learn some fun facts about 24 hour time

https://education.abc.net.au/home#!/media/1566174/

Watch the videos below to learn about converting between 12-hour time and 24-hour time

https://www.youtube.com/watch?v=LY-IFUsakhA

https://www.youtube.com/watch?v=i7L71i9uv3o

24 Hour Time

In the last 10 years, there have been an increasing amount of clocks, watches and video recorders which are now using the 24-hour time scale. The main advantage of this scale is that ‘am’ and ‘pm’ do not have to be mentioned, and therefore there is much less chance of any confusion occuring.

The 24-hour time method is always given as a 4-digit number, with the first 2 numbers giving the hour past midnight, and the second 2 numbers giving the minutes.

Note: Sometimes either a ‘colon’ or ‘space’ is used as a separator between the first two numbers and the second two numbers.

Therefore 6:15 pm could be written as 18:15 or 18 15 or 1815

Example 1: Change the following times to 24-hour time:

If it is after 12 noon, then 12 hours must be added to the hour time as shown in (b)

(a) 8:25 am

8:25 am is written as 0825

(b) 8:25 pm

8:25 pm is written as 2025

Example 2: Change the following 24-hour times to am and pm times.

If it is after 12 noon, then 12 must be taken away to convert back to 12 hour time as shown in (b)

hours minutes

(a) 0930

(b) 2130

0930 is the same as 9:30 am

2130 is the same as 9:30 pm

Example 2: Change the following 24-hour times to 12-hour times.

If it is after 12 noon, then 12 must be taken away to convert back to 12 hour time

(a) 4:10 am

(a) 11:40 am

(c) Subtract 12 because the first 2 digits are greater than 12.
20 hours - 12 hours = 8 hours
We have 7 minutes therefore the answer is 8:07 pm

The minutes don’t change

(c) Subtract 12 because the first 2 digits are greater than 12.
18 hours - 12 hours = 6 hours
We have 53 minutes therefore the answer is 6:53 pm

The minutes don’t change

Enabler

These watches show 24-hour time. Rewrite each time using am and pm.

(a)

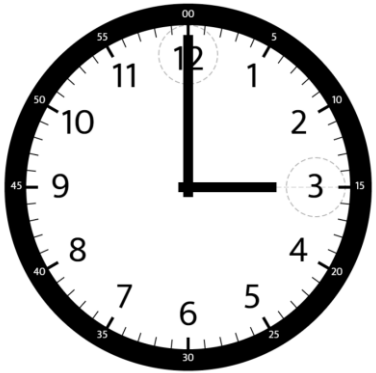
(b)

(c)

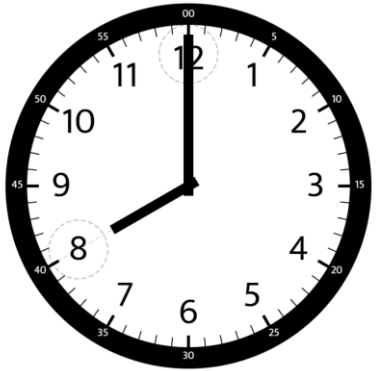
(d)

Enabler

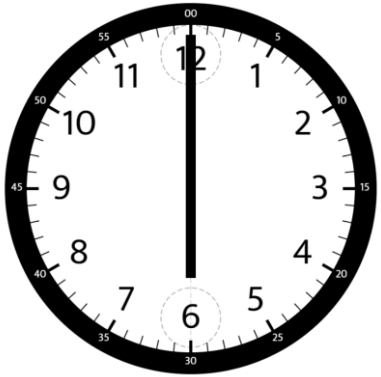
These watches show 12-hour time. Rewrite each time using am and pm.



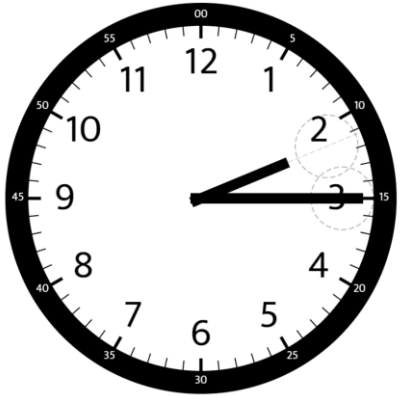
afternoon



morning



evening



afternoon

Enabler

Practise your skills with the game below https://www.studyladder.com.au/games/activity/24-hour-time-convert-to-am-or-pm--35873?backUrl=/games/mathematics/au-year-five/mathematics-time-623

Core

Change the following times to 24-hour times:

(a) 6:43 am

(b) 6:43 pm

(c) 10:15 am

(d) 5:03 pm

Core

Change the following 24-hour times to am and pm times:

(a) 1308

(b) 0830

(c) 0308

(d) 1803

Core

Practise your skills with the game below

https://www.studyladder.com.au/games/activity/24-hour-time-convert-to-am-or-pm--35873?backUrl=/games/mathematics/au-year-five/mathematics-time-623

Extender

Change the following times to 24-hour times:

(a) 9:37 am

(b) 9:37 pm

(c) 11:04 am

(d) 1:04 pm

Extender

Change the following 24-hour times to am and pm times:

(a) 1913

(b) 0149

(c) 1543

(d) 0759

Find the difference in hours and minutes between the following times:

(a) 6:15 am and 3:08 pm

(b) 1103 and 1547

(c) 8:47 am and 6:11pm

Extender

Practise your skills with the game below

https://www.studyladder.com.au/games/activity/24-hour-time-activities-based-on-time-35872?backUrl=/games/mathematics/au-year-five/mathematics-time-623