

17. [Time]

Skill 17.1 Expressing the time in words.

MM3.2 1 2 2 3 3 4 4
MM4.1 1 2 2 3 3 4 4

To say the **minutes** first:

- If the bigger hand is between 12 and 6 you say “**past**” the hour.
Example: “*twenty past eight*”.
- If the bigger hand is between 6 and 12 you count back “**to**” the next hour.
Example: “*ten to nine*”.
- Or say



“a quarter
past eight”



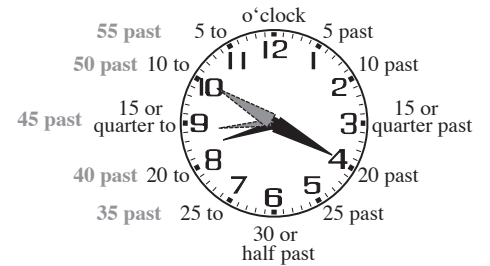
“half
past ten”



“a quarter
to two”

To say the **hours** first:

- Say the number that the smaller hand is on or just past.



Hint:

Hours (h)

Smaller hand

1 number = 1 h

1 lap = 12 h

Minutes (min)

Bigger hand

1 mark = 1 min

1 number = 5 min

1 lap = 1 h = 60 min

Q. Express in words the time shown on this watch.



A. *Five to five*
or *Four fifty-five*

The big hand has turned 55 minutes.
It is nearly back to the o'clock.
The little hand is almost, but not quite up to the five.

a) Express in words the time shown on the wall clock.



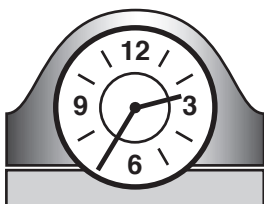
OR two twenty-five

twenty-five past two

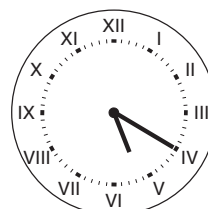
b) Express in words the time shown on the watch.



c) Express in words the time shown on the mantle clock.



d) Express in words the time shown on the clock.

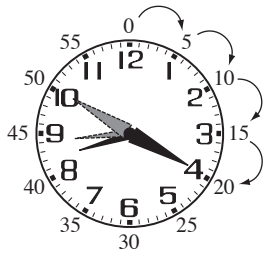


Skill 17.2 Expressing the time in numbers.

MM3.2 1 1 2 2 3 3 4 4
MM4.1 1 1 2 2 3 3 4 4

- Write the hours first. The smaller hand will be exactly on or just past a number.
- Then put the symbol “:”
- Count clockwise by 5’s from 12 (or 0 minutes) to the smaller hand. Write the minutes.

Example: The clock shows 8:20 (*eight twenty*) and 8:50 (*eight fifty*)



Hint:

Hours (h)

Smaller hand

1 number = 1 h

1 lap = 12 h

Minutes (min)

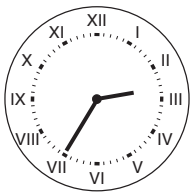
Bigger hand

1 mark = 1 min

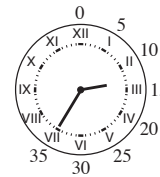
1 number = 5 min

1 lap = 1 h = 60 min

- Q.** Express in numerals the time shown on the clock face.



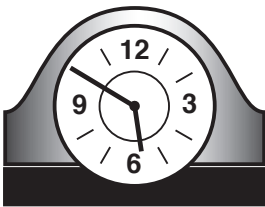
- A.** 2:35



Counting from 12, the big hand has turned 35 minutes.

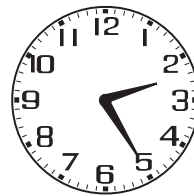
The little hand is just past 2 or midway between the 2 (II) and the 3 (III).

- a)** Express in numerals the time shown on the clock.



5 : 50

- b)** Express in numerals the time shown on the clock.



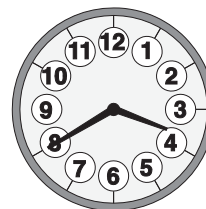
:

- c)** Express in numerals the time shown on the watch.



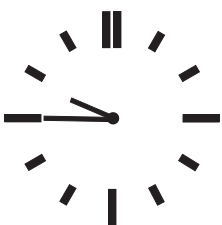
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- d)** Express in numerals the time shown on the clock.



:

- e)** Express in numerals the time shown on the clock.



:

- f)** Express in numerals the time shown on the watch.



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Skill 17.3 Identifying centuries.

MM3.2 1 1 2 2 3 3 4 4
MM4.1 1 1 2 2 3 3 4 4

- Say the year number, hundreds first and then say the rest.
Example: 809 - eight hundred and nine.
1932 - nineteen hundred and thirty-two.

- Add 1 to the hundreds number to find the century.
Example: Television started in 1932, in the 20th century.

Hint: Years in the first century do not start with a 1.

Years in the 2nd century start with a 1.

Similarly years in the 20th century start with a 19.

Because of the first century the names of centuries seem like they are 100 years ahead of the numbers.

Years	Century
1 - 100	1st
101 - 200	2nd
201 - 300	3rd
301 - 400	4th
1801 - 1900	19th
1901 - 2000	20th
2001 - 2100	21st

- Q.** In which century did the Ming Dynasty (1368 - 1644) become the ruling dynasty of China?

A. 14th century

Counting from year one, 1368 is in the 14th block of 100 years so the Ming Dynasty began in the 14th century.

- a)** Christopher Columbus discovered America in 1492. Which century was this?

15th century

- b)** In 1066 the Vikings and the Normans invaded England, trying to claim the throne. Which century was it?

- c)** In which century was telephone inventor Alexander Graham Bell (1847 - 1922) born?

- d)** The last shipment of convicts to Tasmania arrived fifty three years into the 19th century. Which year was this?

- e)** Inventor David Unaipon (1872-1967) of the Ngarrindjeri people was the first Aboriginal writer to be published. In which century did he die?

- f)** Renaissance artist Sandro Botticelli (1445 - 1510) died in Florence, Italy in which century?

- g)** Eleven years before the end of the 13th century eye glasses were invented. What year was this?

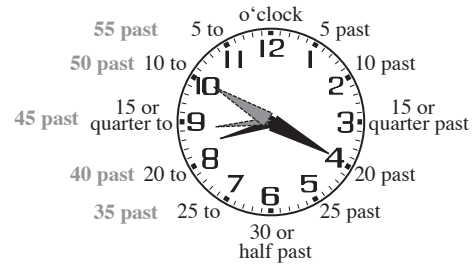
- h)** The first school was established in Australia 12 years before the start of the 19th century. What was the year?

Drawing the **minute** (min) hand.

- If the time says “**past**”:
Count clockwise by 5’s, touching as you go, the clock numbers starting with 12.
Example: “*twenty past eight*” 8:20
Hint: Quarter past is 15 min past.
- If the time says “**to**”:
Count anti-clockwise by 5’s touching as you go, the clock numbers starting with 12.
Example: “*ten to nine*”
Hint: Quarter to is 15 min to.
- If the time given is digital:
Count clockwise by 5’s from 12 (or 0 min)
Example: “*eight twenty*” 8:20 or “*eight fifty*” 8:50


Drawing the **hour** (h) hand.

- If the time says “**past**”:
Draw the smaller hand after the hour.
- If the time says “**to**”:
Draw the smaller hand before the hour.
- If the time given is digital:
Draw the hour hand on or past the hour and moving toward the next number.
Example: “*eight fifty*” 8:50



Q. Draw hands on the clock to show that the time is quarter past eight.



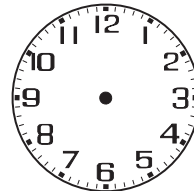
A.  One quarter of 60 is 15. So the big hand is at 15 minutes past. Counting by 5’s the big hand is pointing to the 3. The little hand is quarter of the way past the eight and toward the nine.

a) Draw hands on the alarm clock to show that the time is 19:40.

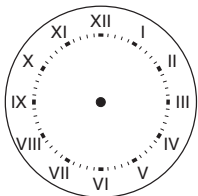


19:40 is 24 hour time. An analogue clock shows 12 hours. Once the time goes past 12 noon, subtract 12 to get back to 12 hour time. To show 19:40 you would set the hands at 7:40

b) Complete the clock face to show that the time is half past ten.



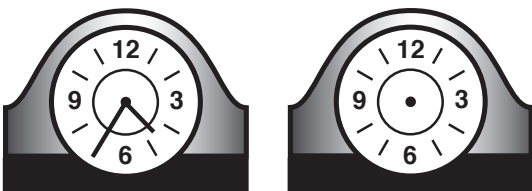
c) Complete the clock face to show the time 18:05.



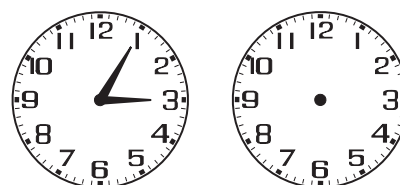
d) Draw hands on the watch to show that the time is 5:20.



e) Complete the clock face to show the time 2 hours and 10 minutes later.



f) Complete the clock face to show the time 4 hours and 15 minutes earlier.



Skill 17.5 Converting time units.

MM3.2 11 22 33 44
MM4.1 11 22 33 44

Hint: Conversion Facts

1 century = 100 years

1 decade = 10 years

1 year = 12 months = 52 weeks = 365 days

1 leap year = 366 days

1 fortnight = 2 weeks

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds

Days in the month:

30 days have September

April

June

and November.

All the rest have 31

except for February alone which has

28 days clear and 29 in each leap year.

Q. Write in days:

Month of July =

A. 31 days

July has 31 days as in the rhyme.

a) Write in years:

1 decade = 10 years

b) Write in days:

24 hours = 1 day

c) Write in days:

Month of May = 31 days

d) Write in minutes:

1 hour = 60 min

e) Write in weeks:

1 fortnight = 2 weeks

f) Write in seconds:

1 min = 60 s

g) Write in years:

1 century = 100 years

h) Write in hours:

60 minutes = 1 hour

i) Write in days:

1 year = 365 days

j) Write in days:

1 week = 7 days

When calculating **hours forward**:

- Change from am to pm when you pass noon.
- Change from pm to am when you pass midnight.

When calculating **minutes forward**:

- After 60 minutes go to the next hour.

When calculating **hours backward**:

- Change from pm to am when you pass noon.
- Change from am to pm when you pass midnight.

When calculating **minutes backward**:

- After 60 minutes go to the previous hour.

Q. The movie 'A hitchhiker's guide to the galaxy' runs for 110 minutes. If the movie finishes at 1:20 pm, at what time does it start?

A. *11:30 am*

Convert 110 minutes to hours and minutes. $110 \text{ min} = 1 \text{ h} + 50 \text{ min}$. The finish time is 1 h + 20 min after midday. So, the start time would be 30 min before midday or 11:30 am.

a) The Australian F1 Grand Prix starts at 2:00 pm. At what time will it finish if it goes for 1 hour and 25 minutes?

$2:00 + 1:25 \Rightarrow$

b) Clarke woke at 6:30 am after 10 hours sleep. At what time did Clarke go to sleep?

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c) The movie started at 3:40 and played for 105 minutes. At what time did the movie finish?

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d) Samantha was in a queue for 3 hours and 55 minutes and purchased concert tickets at 5:20 pm. At what time did she join the queue?

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e) A fruit cake requires 75 minutes baking time. It is 11:10 am when the mix is put in the oven. At what time will the cake be cooked?

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f) Fred made an appointment for 2:20 pm. It is now 9:25 am. How long does Fred have to wait?

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g) Queen's Bohemian Rhapsody plays for nearly 6 minutes. If the song finishes when the clock strikes 10:00 pm, at what time did it start?

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h) The women's world record for the 3000 m is 8:06.11. The youth world record for girls over the same distance is 8:36.45. How much faster are the women?

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Q. According to the schedule, what is the longest amount of time the Yarraville Library is open for in any one day?

Yarraville Library

Opening Hours

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Closed	10am - 1pm	10am - 1pm	2pm - 5pm	2pm - 5pm	10pm - 12noon	Closed

A. 3 hours

Check the number of open hours for each day.

10 am till 1 pm is 3 hours.

2 pm till 5 pm is 3 hours.

a) How much time do you spend watching TV if you watch 'Jakers' through to the end of 'Roller Coaster'?

ABC	
3:30	Play School (R) 81786
3:55	Todd World (R) 8467250
4:10	Jakers! (R) 133298
4:35	Basil Brush 7752328
5:00	Roller Coaster
6:05	Doctor Who (R,S) 9597415
6:30	Beat The Chef (S) 8434
7:00	News (S) 637

You watch from 4:10 to 6:05. There are 50 min from 4:10 until 5:00 and 1 h and 5 min after that.

1 h 55 min

b) What train would you need to catch from Central station to be at Bondi station by 5:15 am?

Eastern Suburbs & Illawarra Line to Bondi Junction Weekdays			
Redfern	4:39 am	4:49 am	5:04 am
Central	4:42 am	4:52 am	5:07 am
Town Hall	4:44 am	4:54 am	5:09 am
Martin Place	4:46 am	4:56 am	5:11 am
Kings Cross	4:48 am	4:58 am	5:13 am
Edgecliff	4:50 am	5:00 am	5:15 am
Bondi Junction	4:53 am	5:03 am	5:18 am

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c) According to the schedule, what day is it if the Footscray Library is opening at 1 pm?

Footscray Library
Opening Hours

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
10am - 8pm	10am - 8pm	10am - 8pm	10am - 8pm	10am - 8pm	1pm - 5pm	2pm - 5pm

d) According to the session times, in what state am I if my showing of 'Bewitched' ends at 11:42 am?

<i>Bewitched</i> (PG) 102 mins	Rockingham (WA)	10:00 am
	Brisbane Regent (QLD)	10:15 am
	George St Cinemas (NSW)	10:30 am

e) Using 12 hour am/pm time, when is the 6:45 pm flight from Melbourne scheduled to arrive in Mildura on the 2nd of August, 2011?

Flights Out: Melbourne to Mildura - Friday 2 Aug 2011					
Time	From	Time	To	Flight	Duration
08:35	Melbourne	09:40	Mildura	■ QF2078	1h 5m
13:50	Melbourne	15:05	Mildura	■ QF2082	1h 15m
15:10	Melbourne	16:15	Mildura	■ QF2084	1h 5m
18:45	Melbourne	19:50	Mildura	■ QF2086	1h 5m

f) What is the actual time of arrival at Dean Street if the 8:30 am bus from Wodonga is running 7 minutes late?

Mylon's Wodonga/Albury Bus Timetable (am)											
Hovell St Wodonga	7:05	7:30	8:00	8:30	9:15	9:45	10:15	10:45	11:15	11:45	
Dean St Albury	7:20	7:40	8:10	8:45	9:30	10:00	10:30	11:00	11:30	12:00	

: