

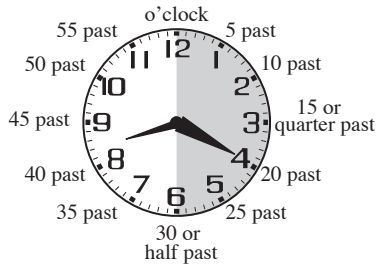
17. [Time]

Skill 17.1 Expressing the time in words.

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

TIME - Past

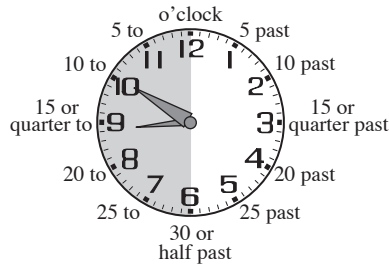
Big hand between 12 and 6



“Twenty **PAST** eight”

TIME - To

Big hand between 6 and 12



“Ten **TO** nine” OR “Nine fifty”

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



“a quarter
PAST eight”



“half
PAST ten”



“a quarter **TO** two”

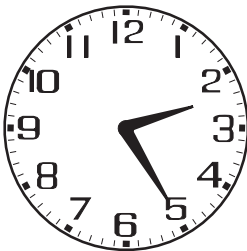
Q. Write the time in words.



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.

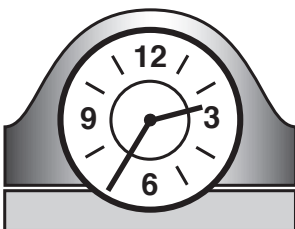
a) Write the time in words.



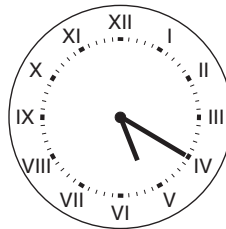
b) Write the time in words.



c) Write the time in words.



d) Write the time in words.

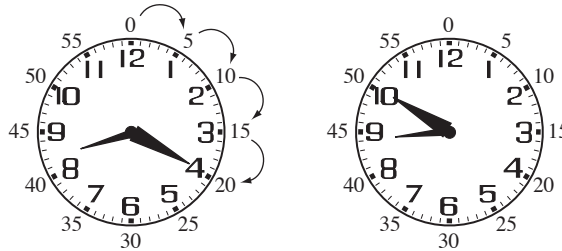


Skill 17.2 Expressing the time in digital form.

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 bigger hand. Write the minutes.

Example: The clocks show **8:20** (*eight twenty*) and **8:50** (*eight fifty*)



Hours (h)

Smaller hand

1 number = 1 h

1 lap = 12 h

Minutes (min)

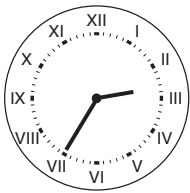
Bigger hand

1 mark = 1 min

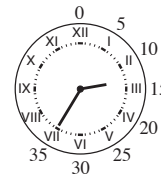
1 number = 5 min

1 lap = 1 h = 60 min

Q. Write the time in digital form.



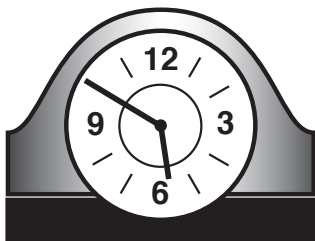
A. **2:35**



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

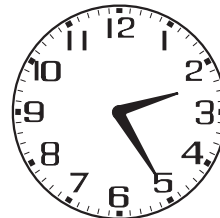
The little hand is just past 2 or midway between the 2 (II) and the 3 (III).

a) Write the time in digital form.



5 : 50

b) Write the time in digital form.



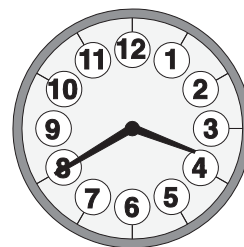
:

c) Write the time in digital form.



:

d) Write the time in digital form.



:

e) Write the time in digital form.



:

f) Write the time in digital form.



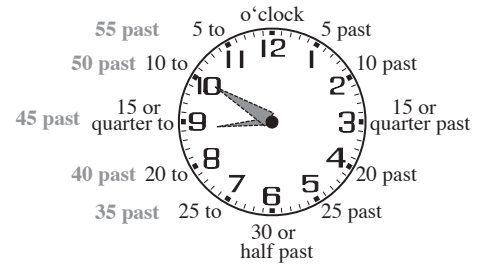
:

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

- If the time says “**past**”:
Count clockwise by 5’s, pointing as you go, the clock numbers starting with 12.
Example: “*twenty past eight*” 8:20
- Draw the big hand pointing to 4.
- If the time says “**to**”:
Count anti-clockwise by 5’s, pointing as you go, the clock numbers starting with 12.
Example: “*ten to nine*”
- Draw the big hand pointing to 10.
- 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.

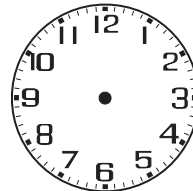


A.  One quarter of 60 is 15. So the big hand is at 15 minutes past. Counting by 5’s the big hand is pointing to the 3. The little hand is quarter of the way past the eight and toward the nine.

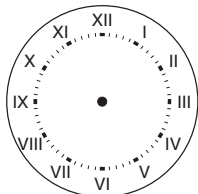
a) Draw hands on the clock to show that the time is 7:40.



b) Draw hands on the clock to show that the time is half past ten.



c) Draw hands on the clock to show that the time is 6:05.



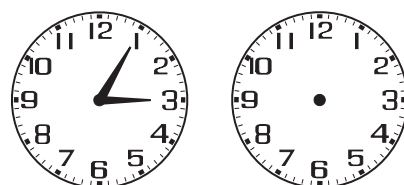
d) Draw hands on the watch to show that the time is 5:20.



e) Draw hands on the second clock to show that the time is 2 hours and 10 minutes later.



f) Draw hands on the second clock to show that the time is 4 hours and 15 minutes earlier.

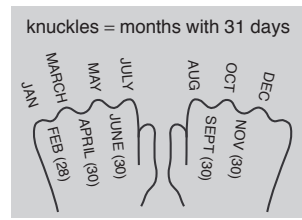


Conversion Facts - TIME

- 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. Convert to minutes:

$3\frac{1}{2}$ hours =

A. $3\text{ h} \times 60 = 180\text{ min}$ To convert hours to minutes, multiply by 60. Add the minutes.
 $\frac{1}{2}\text{ hr} = 30\text{ min}$
 $180 + 30 = \mathbf{210\text{ min}}$

a) Convert to years:

3 decades =

$1\text{ decade} = 10\text{ years so } 3 \times 10 =$

b) Convert to days:

24 hours =

c) Convert to days:

Month of May =

d) Convert to minutes:

$1\frac{1}{4}$ hours =

e) Convert to weeks:

4 fortnights =

f) Convert to seconds:

$2\frac{1}{2}$ min =

g) Convert to years:

5 centuries =

h) Convert to hours:

180 minutes =

i) Convert to days:

2 years =

j) Convert to days:

8 weeks =

TIME OF DAY

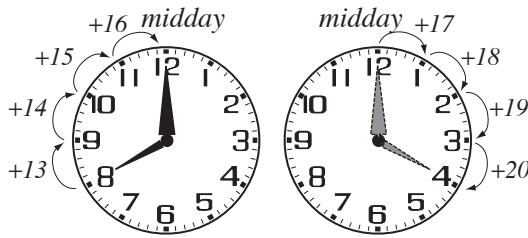
- Morning - sunrise to midday
- Afternoon - midday to 6 pm
- Evening - 6 pm to bedtime
- Night - sunset to sunrise



- Rule 1: After 60 minutes go to the next hour.
- Rule 2: After 12 hours go to the same time but use, am instead of pm or pm instead of am
Example: It is 11:00 am. In another twelve hours it will be 11:00 pm.
- Rule 3: After 24 hours go to the same time but the next day. (Similar for 48 and 72 hours also.)
- Rule 4: Change from am to pm when you pass midday.
- Rule 5: Change from pm to am when you pass midnight.

Q. It is 8:00 pm. In another 20 hours will it be morning or afternoon?

A. *afternoon*



Break 20 hours up into 12 + 4 + 4 h.
12 hours after 8:00 pm is 8:00 am.
Add the remaining 8 hours by adding 4 hours to get to midday and then 4 more hours to get to 4:00 pm.

a) It is 1:00 pm on Monday. In another 40 hours what day will it be?

.....

b) It is 9:30 pm on Saturday. In another 36 hours what day will it be?

.....

c) It is 7:00 am. In another 50 hours will it be morning or afternoon?

.....

d) It is 3:00 pm. In another 20 hours will it be morning or afternoon?

.....

e) It is 1:30 am. What was the time 2 hours and 20 minutes before this?

..... :

f) It is 3:00 pm. In another 10 hours what time will it be?

..... :

g) It is 18:00. In another 10 hours what time will it be?

[Use the 24-hour clock.]

.....

h) It is 17:15. What was the time 2 hours and 20 minutes before this?

[Use the 24-hour clock.]

.....

Skill 17.5 Calculating periods of time (2).

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

i) 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?

.....

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

.....

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

.....

l) 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?

.....

m) 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?

.....

n) It is now 9:25 am. Fred has an appointment in 4 hours and 35 minutes time. At what time is Fred's appointment?

.....

o) 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?

.....

p) 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?

..... s

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?

.....

r) Up to 2013, the longest ever Davis Cup tennis match went for 7 hours and 2 minutes. How much longer was the Wimbledon match that lasted 11 hours and 5 minutes?

.....

s) You get on the bus at 10:30 am. The trip is expected to take 2 hours and 50 minutes. At what time should you arrive?

.....

t) Joseph spends 1 hour and 20 minutes swimming each morning. He starts at 6:15 am. At what time does Joseph finish?

.....

Skill 17.6 Comparing periods of time.

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

- Convert all times to the same unit. (see skill 17.4, page 144)
- Compare the times.

<p>Q. Circle the longest time.</p> <p style="text-align: center;">2 h 2100 s 210 min</p>	<p>A. $2\text{ h} = 120\text{ min}$ $2100\text{ s} = 35\text{ min}$ $210\text{ min} = 210\text{ min}$</p> <p style="text-align: center;">2 h 2100 s 210 min</p> <p style="text-align: right;">Convert to minutes.</p>
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<p>a) Circle the longest time.</p> <p style="text-align: center;">1 weekend 96 h 3 days</p> <p><i>1 weekend = 2 days</i></p> <p>.....</p> <p><i>96 hours = 4 days</i></p> <p>.....</p>	<p>b) Circle the longest time.</p> <p style="text-align: center;">3 months 100 days 15 weeks</p> <p>.....</p> <p>.....</p>
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<p>c) Circle the shortest time.</p> <p style="text-align: center;">1 fortnight 4 weeks 12 days</p> <p>.....</p> <p>.....</p>	<p>d) Circle the longest time.</p> <p style="text-align: center;">15 months 1 year 245 days</p> <p>.....</p> <p>.....</p>
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<p>e) Circle the shortest time.</p> <p style="text-align: center;">250 mins 1500 s 4 h</p> <p>.....</p> <p>.....</p>	<p>f) Circle the shortest time.</p> <p style="text-align: center;">quarter of an hour 10 mins 500 s</p> <p>.....</p> <p>.....</p>
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<p>g) Circle the longest time.</p> <p style="text-align: center;">6000 s 106 min $1\frac{1}{2}\text{ h}$</p> <p>.....</p> <p>.....</p>	<p>h) Circle the shortest time.</p> <p style="text-align: center;">2500 min 2 days 50 h</p> <p>.....</p> <p>.....</p>
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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?

A. **3 hours**

Check the number of open hours for each day.

10 am until 1 pm is 3 hours.

2 pm until 5 pm is 3 hours.

Yarraville Library

Opening Hours

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

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

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



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

Sydney - 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

:

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) When is the 11:45 pm flight from Melbourne scheduled to arrive in Christchurch on the 3rd of June, 2014?

f) What is the actual time of arrival at Wellington if the 1:10 pm ferry from Picton is running 7 minutes late?

Flights Out: Melbourne to Christchurch - Tuesday 3 June 2014

Time	From	Time	To	Flight	Duration
08:45	Melbourne	04:45	Christchurch	NZ0852 & NZ0351	6h 0m
10:00	Melbourne	07:20	Christchurch	NZ7942 & NZ0545	7h 20m
11:45	Melbourne	08:55	Christchurch	NZ0124 & NZ0553	7h 10m
06:15	Melbourne	11:35	Christchurch	NZ0892	3h 20m

Cook Strait Ferry Timetable - Picton to Wellington

Destination	Departs	Arrives	Frequency	Ferry
Wellington	6.25 am	9:30 am	TWTFSS	Aratere
Wellington	10.30 am	1:40 pm	Daily	Arahura
Wellington	1.10 pm	4:20 pm	Daily	Kaitaki
Wellington	6.30 pm	9:40 pm	Daily	Aratere

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