

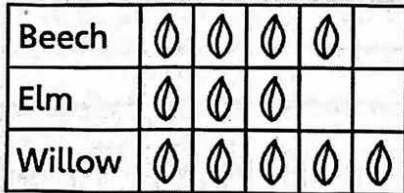
Name: Answers Gr. 3 June 8-12

PDM3-10 Comparing Graphs

Karen, Sal, and Yu collected some leaves. They each made a graph.

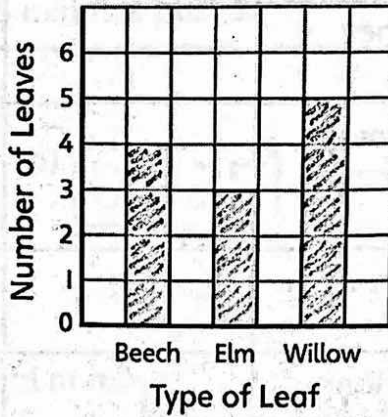
Karen's graph:

Leaves Collected



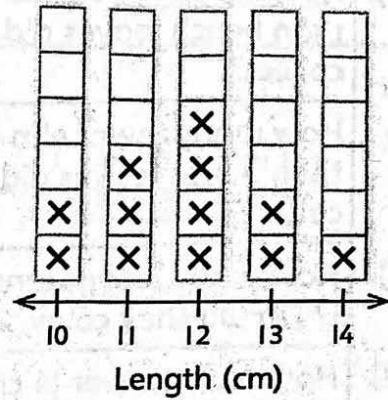
Sal's graph:

Leaves Collected



Yu's graph:

Lengths of Leaves



1. a) What type of graph did each student draw?

Karen: pictograph Sal: bar graph Yu: line plot

b) What does each graph have? Write \checkmark or X.

Feature	Pictograph	Bar Graph	Line Plot
Title	\checkmark	\checkmark	\checkmark
Labels	\checkmark	\checkmark	X
Number line	X	\checkmark	\checkmark
Vertical axis	X	\checkmark	X
Scale	\checkmark	X	X
Symbols	\checkmark	\checkmark	\checkmark

c) How many leaves did Karen, Sal, and Yu collect? 12
How does each graph show this?

Pictograph: leaf symbol, 12

Bar graph: squares, 12

Line plot: "X", 12













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2. Use the graphs that Karen, Sal, and Yu made to answer the question. Say which graph or graphs you could use to answer the question.

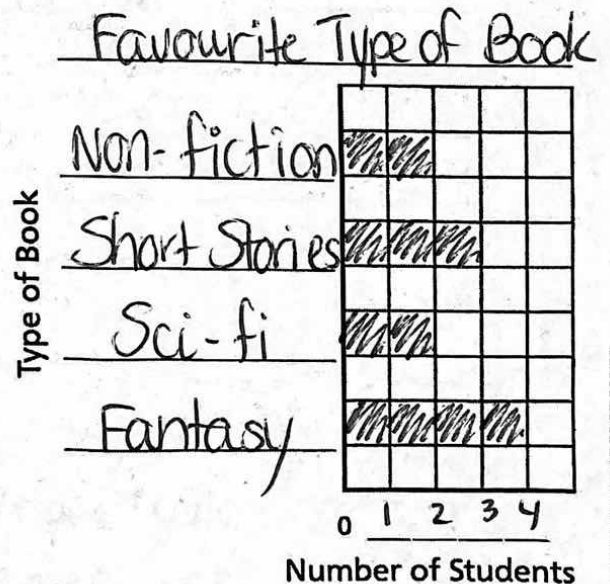
	Answer	Graph(s)
a) How many more willow leaves than beech leaves did they collect?	1	pictograph, bar graph
b) How many fewer elm leaves than beech leaves did they collect?	1	pictograph, bar graph
c) How many leaves longer than 12 cm did they collect?	3	line plot
d) How many fewer 14 cm long leaves than 10 cm long leaves were there?	1	line plot
e) What was the most common type of leaf?	Willow	pictograph, bar

3. Students voted for their favourite type of book.

- a) Make a bar graph showing the same data as the pictograph.

Favourite Type of Book			
			
			
			
			
Fantasy	Sci-fi	Short stories	Non-fiction

 = 1 student



- b) How many more students voted for fantasy books than for science fiction?
- c) How many fewer students voted for non-fiction books than for short stories?

ME3-14 Digital Clocks

Digital clocks show both the hours and the minutes with two digits. The digital clock shows that 5 minutes have passed after 3 o'clock.



We say the time is 3:05 or 5 minutes past 3.

1. Write the time in numbers.



2:17



12:30



1:03

2. Write the time in words and numbers.



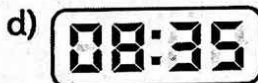
15 minutes past 7



20 min. past 10



23 min. past 1



35 min. past 8



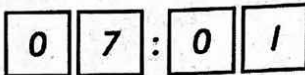
40 min. past 2



9 min. past 6

3. Write the time the way it looks on a digital clock.

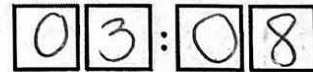
a) 7:01



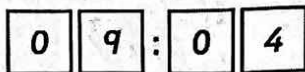
b) 4:15



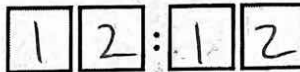
c) 3:08



d) 4 minutes past 9



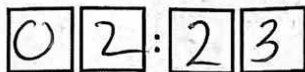
e) 12 minutes past 12



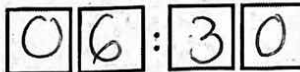
f) 9 minutes past 11



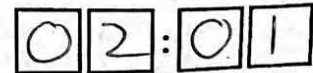
g) 23 minutes past 2



h) 30 minutes past 6



i) 1 minute past 2

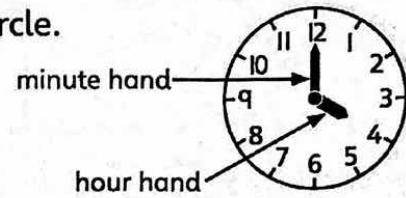


ME3-15 Analog Clock Faces and Hands

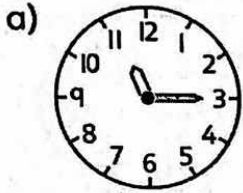
Analog clock faces show numbers from 1 to 12 in a circle.
An analog clock has different hands.

The hour hand is shorter.

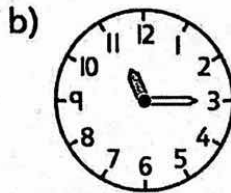
The minute hand is longer.



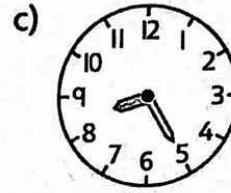
1. Which hand is shaded, the hour hand or the minute hand?



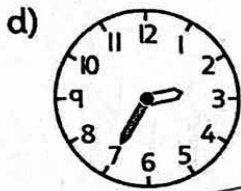
hour minute



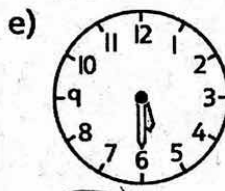
hour minute



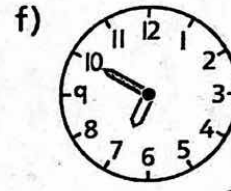
hour minute



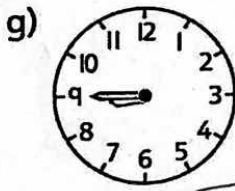
hour minute



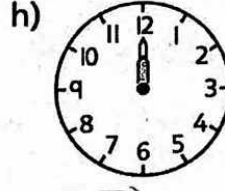
hour minute



hour minute



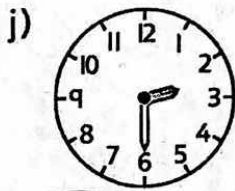
hour minute



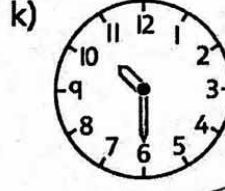
hour minute



hour minute



hour minute



hour minute



hour minute

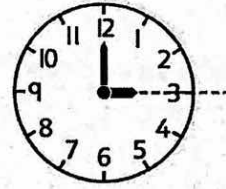
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2. How is an analog clock face the same as a number line? How is it different from a number line?

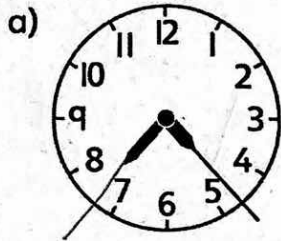
It has notches and #'s starting at 1 and going up. It stops at 12

The minute hand points directly at 12.
 The hour hand points directly at 3.
 The time is 3 o'clock.

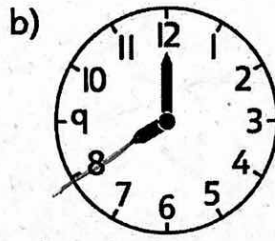
We write this time as 3:00.



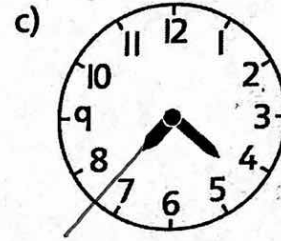
3. Draw a line to show where the hour hand is pointing. Is it o'clock?
 Write "yes" or "no."



no

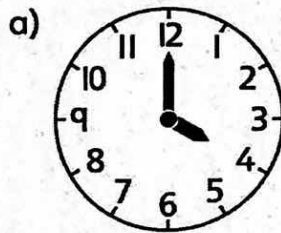


yes



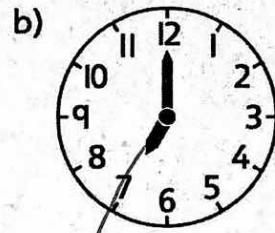
no

4. What time is it?



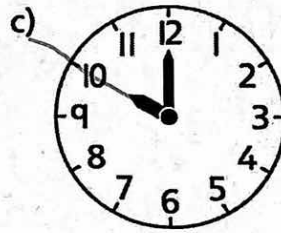
4 : 00

4 o'clock



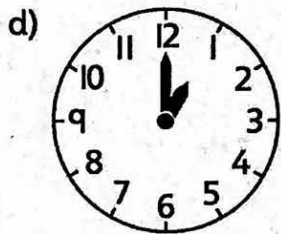
7 : 00

7 o'clock



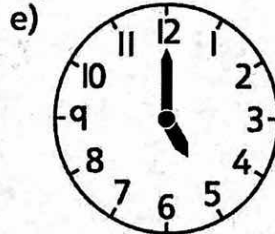
10 : 00

10 o'clock



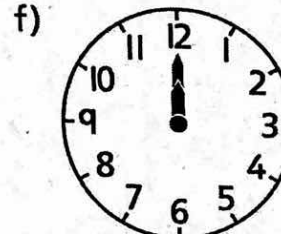
1 : 00

1 o'clock



5 : 00

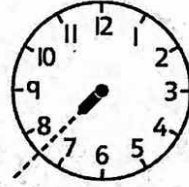
5 o'clock



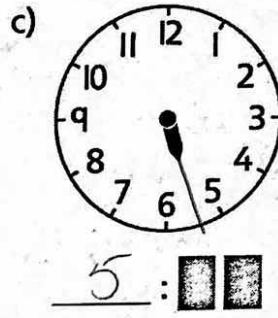
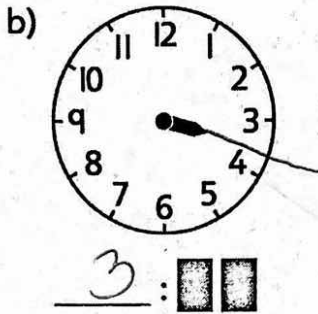
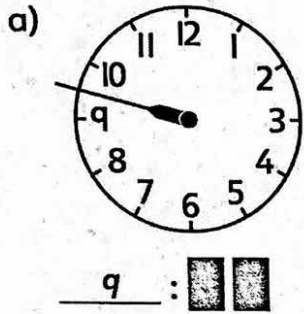
12 : 00

12 o'clock

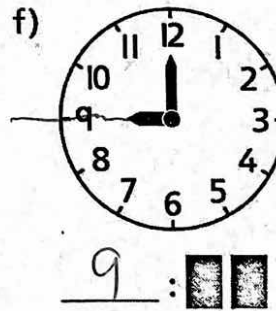
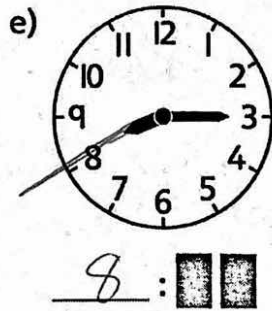
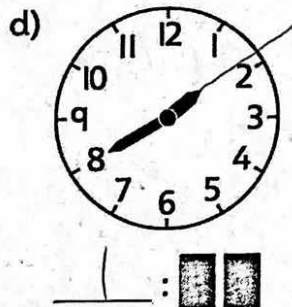
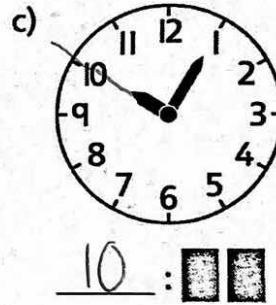
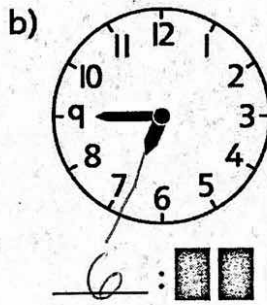
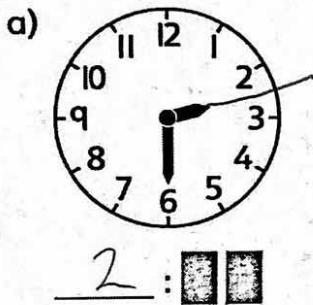
Both hands move from one number to the next.
When the hour hand points between the numbers 7 and 8, the hour is still 7.



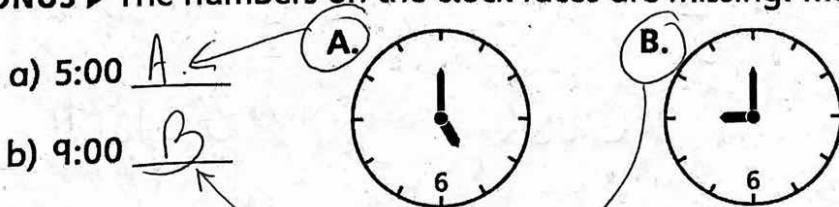
5. Draw a line from the hour hand. Write the hour.



6. Circle the hour hand. Then write the hour.



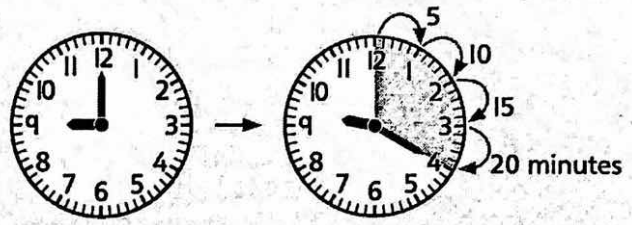
BONUS ▶ The numbers on the clock faces are missing! Match the clock to the time.



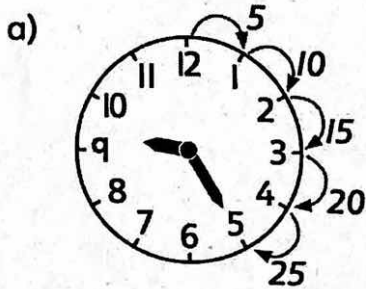
ME3-16 The Minute Hand

When the minute hand moves from one number on the clock face to the next, 5 minutes have passed.

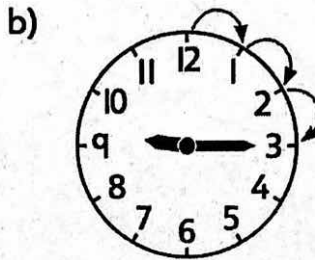
How many minutes is it past 9:00?
Count by 5s.



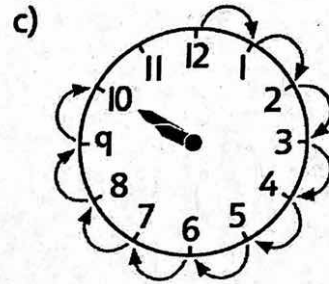
1. How many minutes is it past 9:00? Count by 5s.



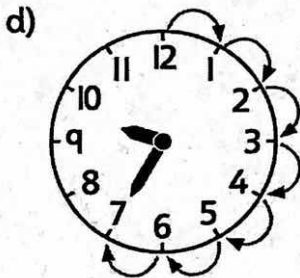
25 minutes



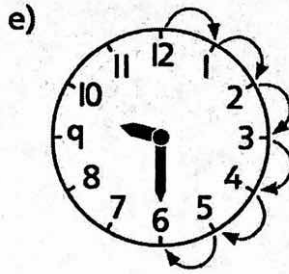
15 minutes



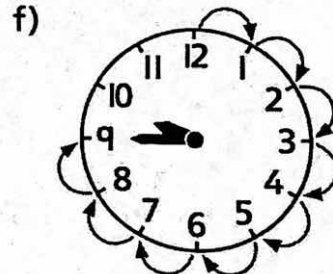
50 minutes



35 minutes



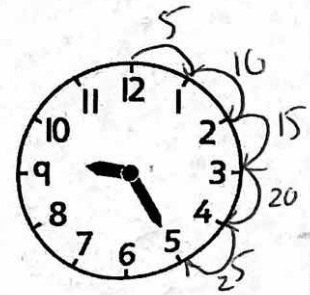
30 minutes



45 minutes

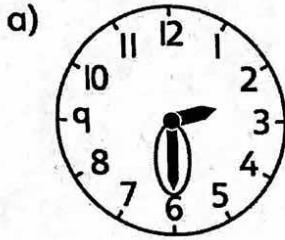
2. Rob thinks that the time is 9:05 because the minute hand points at 5.

Explain his mistake. the minute hand is counted by 5's, starting from 12 → 1 = 5 min. 1 → 2 = 10 minutes... when it gets to the 5, it's showing 25 minutes.

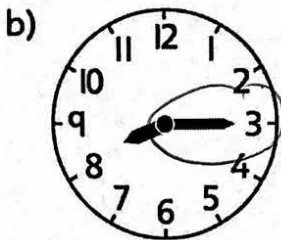


REMINDER ▶ The minute hand is the longer hand.

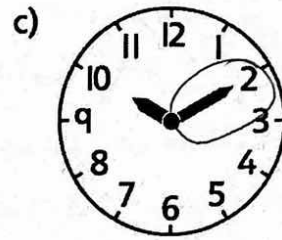
3. Circle the minute hand. Then count by 5s to write the minutes.



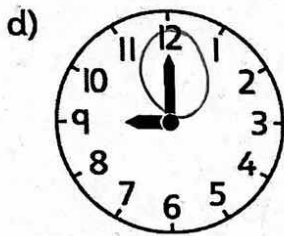
2: 30



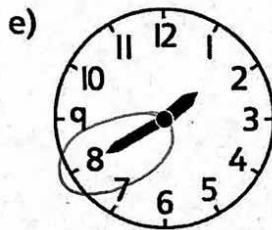
8: 15



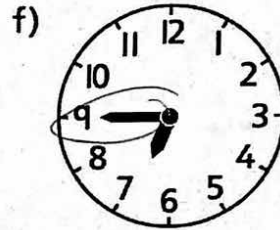
10: 10



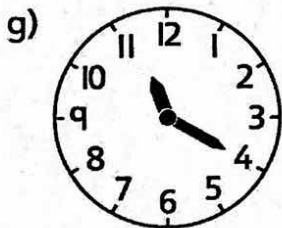
9: 00



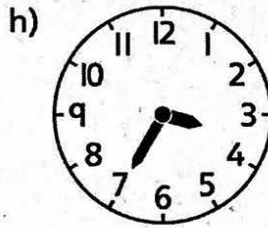
1: 40



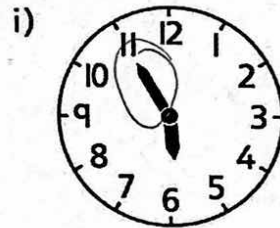
6: 45



11: 20

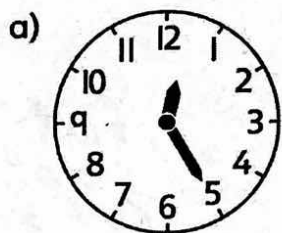


3: 35

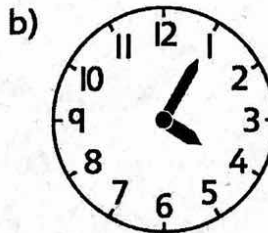


5: 55

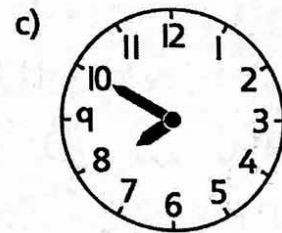
4. What time is it?



25 minutes past 12



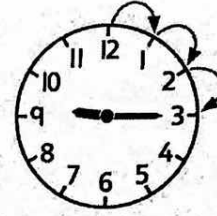
5 minutes past 4



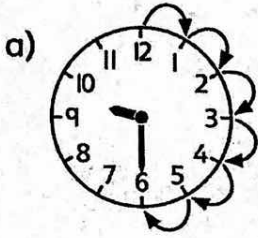
50 minutes past 7

The minute hand points at 3. Three times 5 minutes have passed after 9:00.

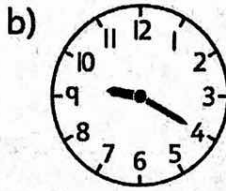
$3 \times 5 = 15$ minutes have passed. The time is 9:15.



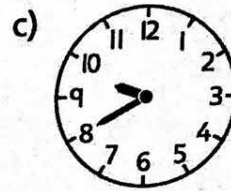
5. Draw the arrows to show how the minute hand moved from 9:00. Then write the multiplication equation.



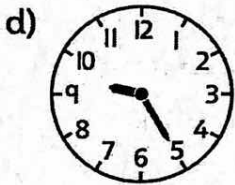
$6 \times 5 = 30$



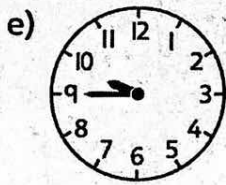
$4 \times 5 = 20$



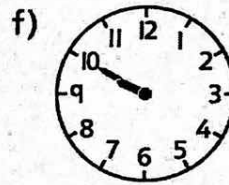
$8 \times 5 = 40$



$5 \times 5 = 25$

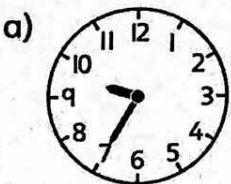


$9 \times 5 = 45$



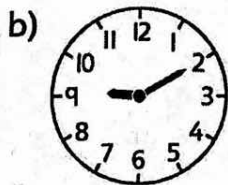
$10 \times 5 = 50$

6. Write a multiplication equation for the minutes passed after 9:00. Then write the time.



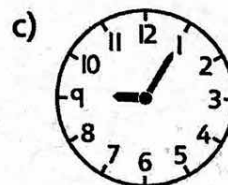
$7 \times 5 = 35$

9: 35



$2 \times 5 = 10$

9: 10

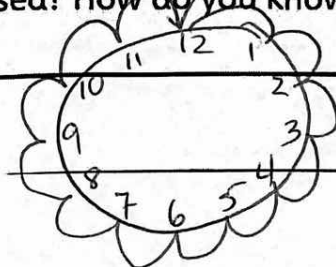


1×5

9: 05

BONUS ▶ The minute hand made one whole circle. How many minutes passed? How do you know?

60 minutes

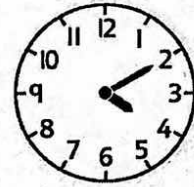


$12 \times 5 = 60$

ME3-17 Time to the Five Minutes

What time is it?

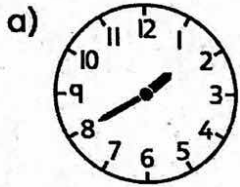
Step 1: Look at the hour hand. It points between 4 and 5.
The hour is 4.



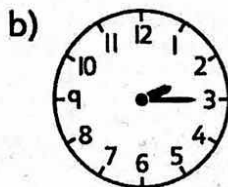
Step 2: Look at the minute hand. It points at 2. Skip count by 5s or multiply by 5 to find the minutes: 5, 10, or $2 \times 5 = 10$.

The time is 4:10.

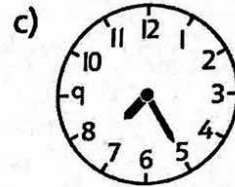
1. What time is it?



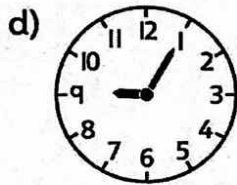
1 : 40



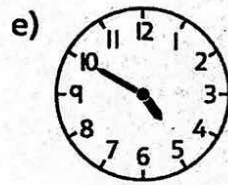
2 : 15



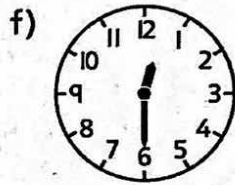
7 : 25



9 : 05

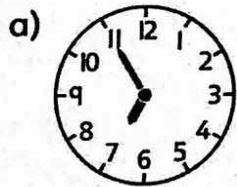


4 : 50

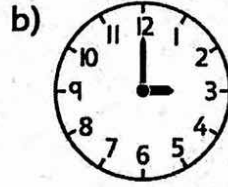


12 : 30

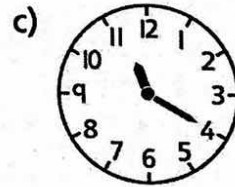
2. Write the time on the digital clock.



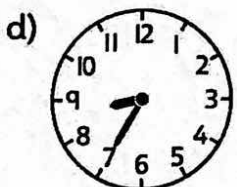
0	6	:	5	5
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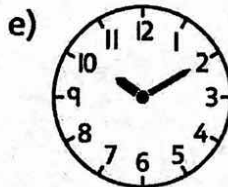
0	3	:	0	0
---	---	---	---	---



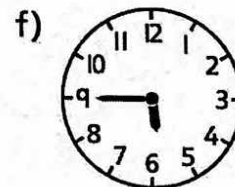
1	1	:	2	0
---	---	---	---	---



0	8	:	3	5
---	---	---	---	---

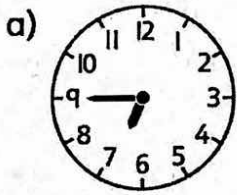


1	0	:	1	0
---	---	---	---	---

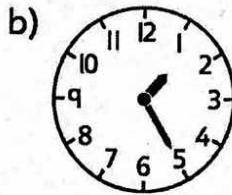


0	5	:	4	5
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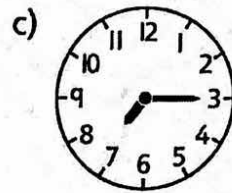
3. Write the time two ways.



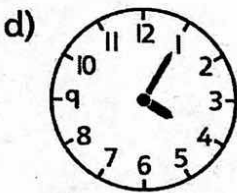
6:45
forty-five
minutes past six



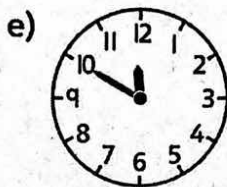
1:25
twenty-five min.
past one



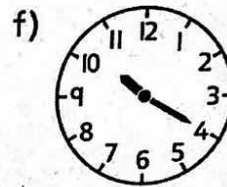
7:15
fifteen min. past
7



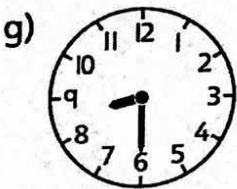
4:05
five min. past
four



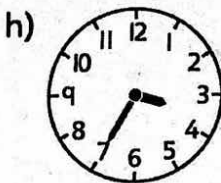
11:50
fifty minutes
past eleven



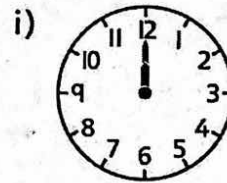
10:20
twenty minutes
past ten



8:30
thirty minutes past
eight or half-past
eight



3:35
thirty-five min.
past three



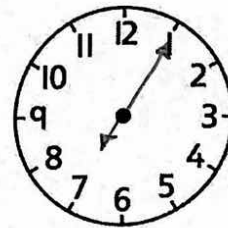
12:00
twelve o'clock or
noon

BONUS ▶

a) Show the time 7:05 on the analog and the digital clock.

b) Write the time in words.

five minutes past seven



0	7	:	0	5
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