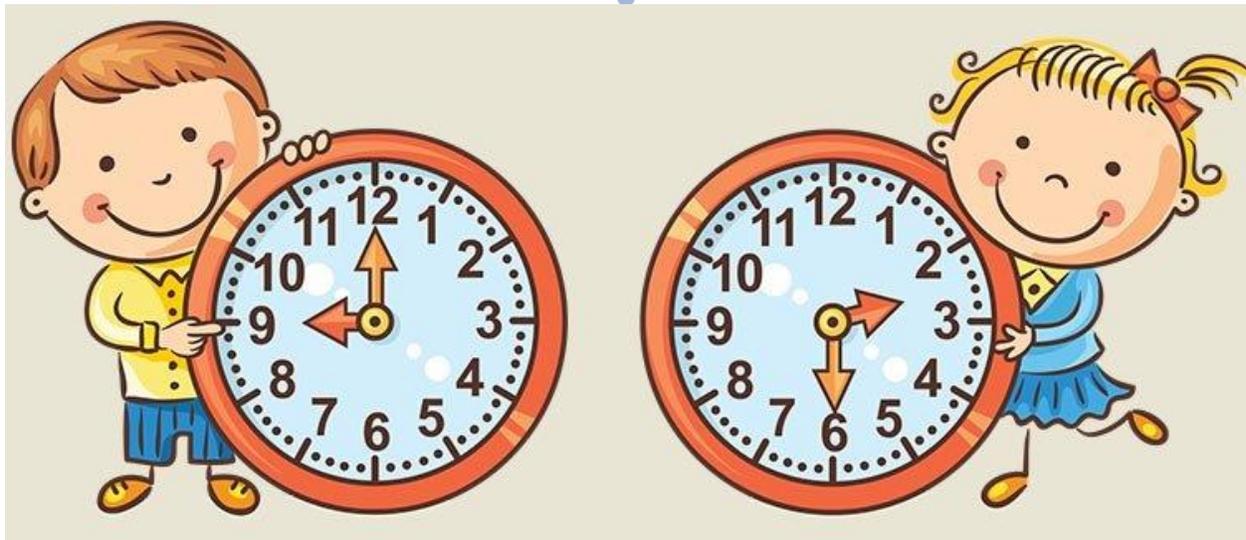




FUNVENTUROUS TIME

Learning to tell Time Basics



JANUARY 1, 2021

THE WALLAROOS YOUTH LEARNING AND ADVENTURES LLC
Meridian, MS, and Nashville TN

Dear Parents,

We believe the power to succeed key component in every child. We know that each child can perform greatness in all their activities. The key is how well we can cultivate that greatness in each child.

At The Wallaroos Youth Roos Youth Learning and Adventure, it is our goal to give you tools and ideas to help you cultivate that greatness in each child. Each child learns differently, however if you have a set of tools that you can pull from your toolkit then you are equipped for the task at hand.

We have tried to make our products for you in a manner that will help you bring out the best in your child and allow for you and your child to be interactive in the process.

It is our goal to make all our learning material free for download because we do genuinely believe that education and educating of our youth should be the greatest investment that we make as a society.

We close with our following belief that founded our company:

“Imagination is such a beautiful gift we can allow a child to with no limits. The process of curiosity is a natural stage of development for children. They are natural-born scientist and investigators. It is our responsibility to foster and nourish those innate skills in our kids. So, go grab those pots and pans or a box and start using those beautiful, colorful, and creative imaginations”.

Rhonda D. Brooks and Rodney D. Brooks
Authors and Co-Founders of The Wallaroos Youth Learning and Adventures LLC



Learning Time

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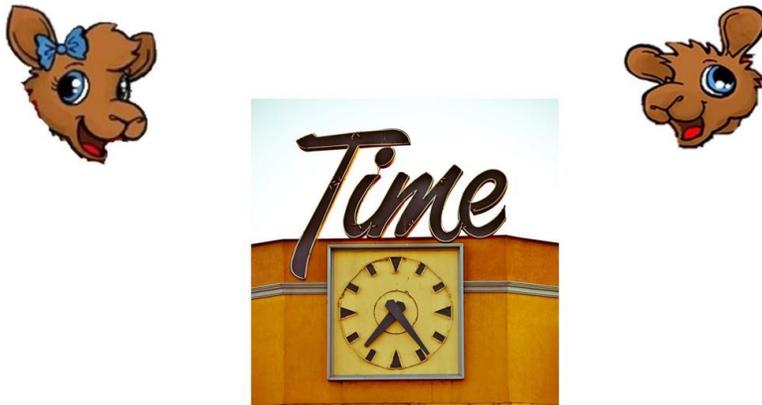
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What is time?

Just like you have length to measure your garden, height to measure how tall you are, weight for the mass of your body, time is a measure for events. Events that happened now or before this or after now.

Like length, weight or height have units Time also has units and those are years, months, weeks, days, hours, minutes, and seconds. As we discussed in Funventurous Math and Money, it is about the numbers. To understand time, you need to understand your numbers.



Measurements of Time

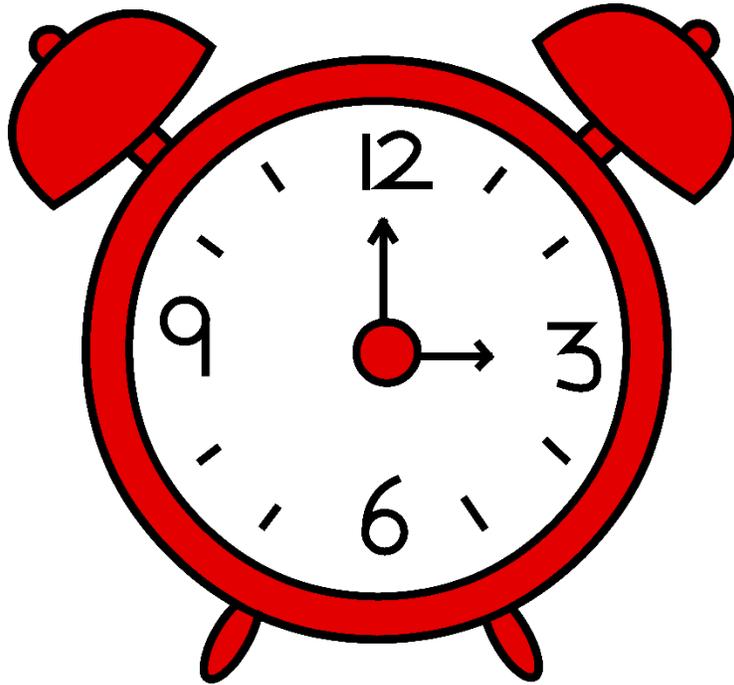
Time is a key component on how we measure a lot of things

- We use time to order events in the past, present and future. We also use it to make comparisons and measure the speed at which things move.
- If you wanted to measure time you could use a watch, clock, hourglass or even a sundial.
- There are 60 seconds in a minute, 60 minutes in an hour and 24 hours in a day.
- Normal years have 365 days, but a Leap year has 366. The Earth takes a little longer than 365 days to go around the Sun, so we add an extra day in February every four years (with a few exceptions) to keep calendars and seasons aligned.
- 10 years is known as a decade, 100 years is known as a century and 1000 years is known as a millennium.
- Milliseconds, microseconds, and nanoseconds are examples of small units of time.
- Planck time is the name given to the smallest known unit of time. It is a little confusing, but it measures the amount of time it takes light to travel 1 Planck length (a distance so small that it cannot even be measured!).
- Scientists believe the moon was used as a form of calendar as far back as 6000 years ago. Calendars have been changing ever since and are fully accurate in modern times.
- Many places use daylight saving time (typically by putting clocks forward an hour) for longer daylight in the evenings.
- Different parts of the world are in different time zones. This means that while you are having breakfast in the morning, someone in another part of the world is having dinner.



What is a Clock?

A clock is a device used to tell time. Moving hands on the face of a clock point to the current hour, minute, and second. A clock can be big enough to be in a giant tower. A clock can also be small enough to fit on a person's wrist, where it is called a watch. Many clocks are made to be beautiful objects as well as useful devices.



How does a Clock work?

There are three main types of clocks: mechanical, electrical, and atomic. All three have the same basic parts. They must have a source of power, a device to keep the parts moving at regular intervals, and a way to display the time.

Mechanical clocks get their power from moving weights or springs. These parts are attached to gears, or toothed wheels. The gears are attached to the hands of the clock. As the gears move, they move the hands. Another device attached to the gears keeps them moving at a regular pace. Mechanical clocks must be wound up to work.

Electrical clocks get their power from electricity instead of weights or springs. The electricity can come from a battery or from an electrical socket in a wall. Some electrical clocks have hands, as mechanical clocks do. Others have a digital display, where the hours, minutes, and seconds are shown as numbers. Electrical clocks are the most common type of clock used today.

Atomic clocks measure time using the waves of energy given off by atoms—the tiny bits of matter that make up the universe. Atomic clocks normally have digital displays. Because atomic clocks are the most accurate type of clock, scientists use them in their work.



Parts of a Clock

The clock has four major parts that you see. The face, the shorthand/hour hand (measures the hours), the longhand/minute hand (measures the minutes) and a long skinny or thin hand called the seconds hand (measures the seconds and it goes around the clock the fastest). To begin with, there are twelve numbers on the face of a clock, and each of those numbers represents an hour. The first time the hands rotate from 1 to 12, the time is labeled AM. AM represents the morning hours. The second time the hands rotate from 1 to 12, the time is labeled PM. PM represents the afternoon, evening, and night hours. The direction that the hands rotate in is called clockwise. The tick marks between the numbers are each counted as one. The number of tick marks from one number to the next is five. This is useful when you begin telling time to the nearest half hour and minute.



Number Measurements of Time on A Clock

A clock has three types/Units of measurements on it: Seconds, Minutes and Hours. Each type/unit of measurement makes up the other.

Seconds – Seconds are measured on the clock by the long/skinny hand. When looking at the face of the clock we will see that there are hash marks around the clock in between the number. There are 60 hash marks on the clock. Each hash mark is a number unit of one. Just like counting the numbers if you count each has in order starting from the first has after 12 back to 12 it would equal 60 hashes. The numbers (1-12) are located at every fifth has mark. Example: the number 1 is at the fifth has mark or 5. The number 2 is at the tenth hash mark or 10. The number 3 is at the fifteenth hash mark or 15. Each hash mark represents a second when the long/skinny hand/secondhand lands go over each hash. Therefore, there are 60 seconds shown on the face of the clock. It takes 60 seconds to make a minute. When the second hand goes through a full 60 seconds then the minute hand will move one minute

Minutes – Minutes are measure on the clock by the long hand on the clock. Just like we discussed above the minute hand operates identical to the secondhand. The has marks are used the same way in movement and counting. However, the minute hand can only move each time the second hand fully goes around for 60 seconds. Therefore, there are 60 minutes shown on the face of the clock. It takes 60 minutes to make an hour. When the minute hand goes through a full 60 minutes then the hour hand will move one hour.

Number Measurements of Time on A Clock Continued

Hours – Minutes are measured on the clock by the shorthand on the clock. The hour hand on measured not by the hashes but the numbers. So, there are 12 numbers on the clock and each time the shorthand/hour hand land on a number then that is the hour time. However, the hour hand can only move each time the minute hand fully goes around for 60 minutes. Therefore, there are 60 minutes shown on the face of the clock. It takes 60 minutes to make an hour. When the minute hand goes through a full 60 minutes then the hour hand will move one hour. There are 12 hours on the face of a clock.



Telling Time

Telling time or to tell the time means to say what the time is, perhaps after somebody asks the time.

There are two common ways of telling the time.

1) Say the hour first and then the minutes. (Hour + Minutes)

- 6:25 - It is six twenty-five
- 8:05 - It is eight O-five (the O is said like the letter O)
- 9:11 - It is nine eleven
- 2:34 - It is two thirty-four

2) Say the minutes first and then the hour. (Minutes + PAST / TO + Hour)

For minutes 1-30 we use **PAST** after the minutes.

For minutes 31-59 we use **TO** after the minutes.

- 2:35 - It is twenty-five **to** three
- 11:20 - It is twenty **past** eleven
- 4:18 - It is eighteen **past** four
- 8:51 - It is nine **to** nine
- 2:59 - It is one **to** three

When it is **15 minutes past** the hour we normally say: **(a) quarter past**

- 7:15 - It is (a) quarter past seven

When it is **15 minutes before** the hour we normally say: **a quarter to**

- 12:45 - It is (a) quarter to one

When it is **30 minutes past** the hour we normally say: **half past**

- 3:30 - It is half past three (but we can also say three-thirty)

Telling Time - Continued

O'clock

We use **o'clock** when there are NO minutes.

- 10:00 - It is ten o'clock
- 5:00 - It is five o'clock
- 1:00 - It is one o'clock

Sometimes it is written as 9 o'clock (the number + o'clock)

12:00

For 12:00 there are four expressions in English.

- twelve o'clock
- midday = noon
- midnight

Asking for the Time

The common question forms we use to ask for the time *right now* are:

- What time is it?
- What is the time?

A more polite way to ask for the time, especially from a stranger is:

- Could you tell me the time please?

The common question forms we use to ask at what time a specific event will happen are:

What time...?

When...?

- What time does the flight to New York leave?
- When does the bus arrive from London?
- When does the concert begin?

Telling Time - Continued

Giving the Time

We use **It is** or **it is** to respond to the questions that ask for the time *right now*.

- **It is** half past five (5:30).
- **It is** ten to twelve (11:50)

We use the structure **AT + time** when giving the time of a specific event.

- The bus arrives **at** midday (12:00).
- The flight leaves **at** a quarter to two (1:45).
- The concert begins **at** ten o'clock. (10:00)

We can also use subject pronouns in these responses.

- It arrives at midday (12:00).
- It leaves at a quarter to two (1:45).
- It begins at ten o'clock. (10:00)

AM vs. PM

We do not normally use the 24-hour clock in English.

We use **a.m.** (am) for the morning and **p.m.** (pm) for the afternoon and night.

3am = Three o'clock in the morning.

3pm = Three o'clock in the afternoon.

Telling Time - Graph



Telling the time

It's ... **o'clock**

It's five **to** ... It's five **past** ...

It's ten **to** ... It's ten **past** ...

It's (a) quarter **to** ... It's (a) quarter **past** ...

It's twenty **to** ... It's twenty **past** ...

It's twenty-five **to** ... It's twenty-five **past** ...

It's half **past** ...

2:00 - It's two o'clock .	2:30 - It's half past two.
2:05 - It's five past two.	2:35 - It's twenty-five to three.
2:10 - It's ten past two.	2:40 - It's twenty to three.
2:15 - It's quarter past two.	2:45 - It's quarter to three.
2:20 - It's twenty past two.	2:50 - It's ten to three.
2:25 - It's twenty-five past two.	2:55 - It's five to three.

We use **AT + TIME** when giving the time of a specific event.

- The class starts at nine o'clock.
- The flight leaves at ten to three.

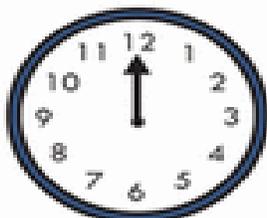
We use **IT IS** or **IT'S** to answer a question that asks for the time right now.

What time is it? - It is half past four.
What's the time? - It's twenty to five.

Let us continue to practice with several worksheets from our partners.

Draw the Hour Hand

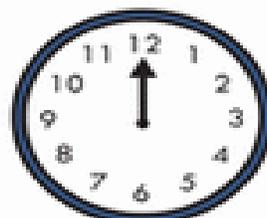
The clocks are missing their hour hands! View the times below.
Draw the hands on the clock to show the correct time.



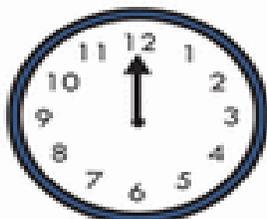
9:00



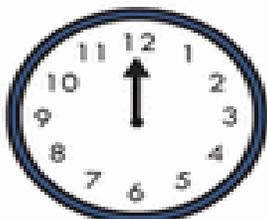
5:00



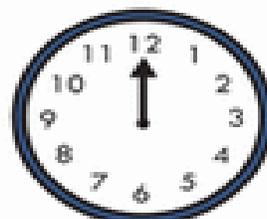
2:00



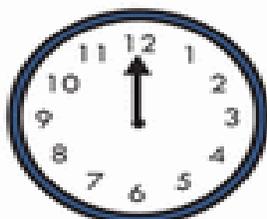
4:00



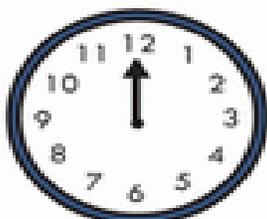
11:00



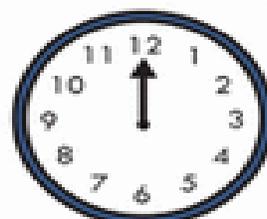
8:00



7:00

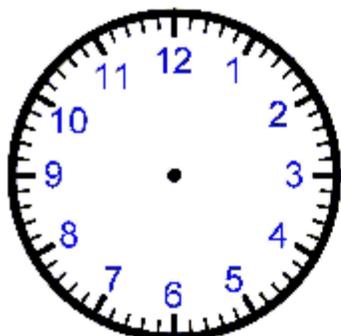


1:00

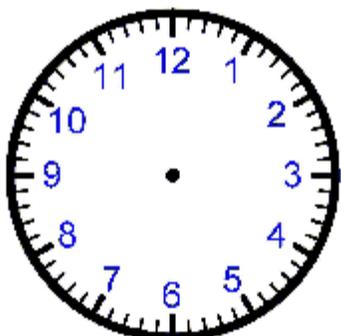


10:00

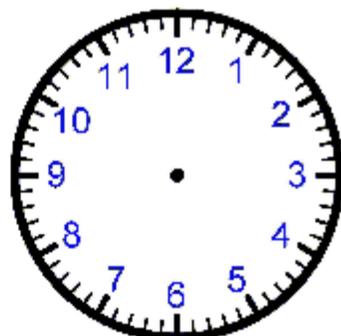
Draw the Hands on the Clock Face



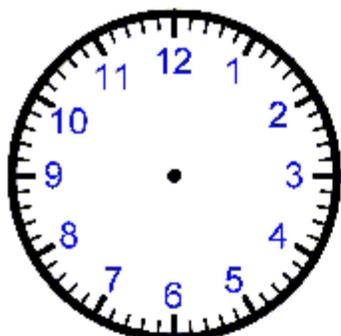
9:20



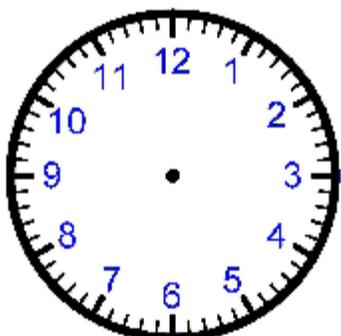
11:20



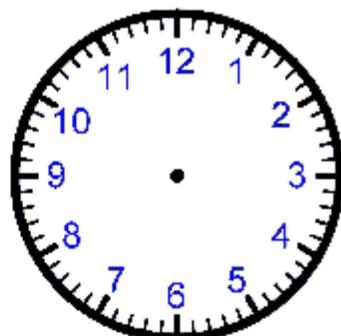
7:20



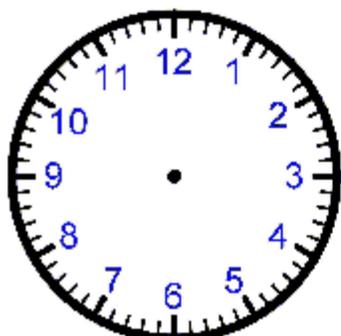
4:20



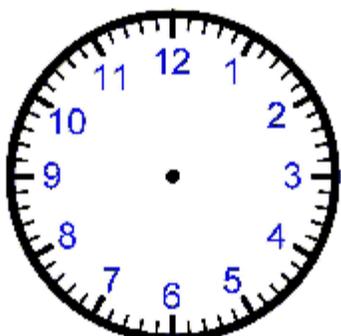
10:20



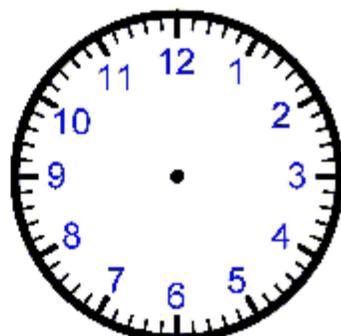
5:00



8:00



9:40



10:20

Reading Clock - Half Hours

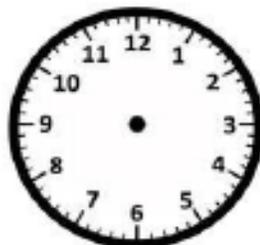
Draw hands on each clock for the time given below:

1)



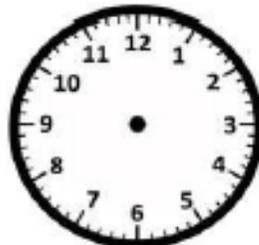
Time: 6:00

2)



Time: 2:30

3)



Time: 5:30

4)



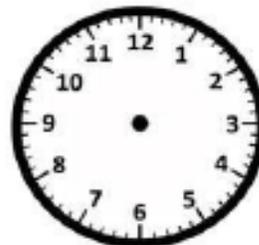
Time: 1:30

5)



Time: 10:00

6)



Time: 12:30

7)



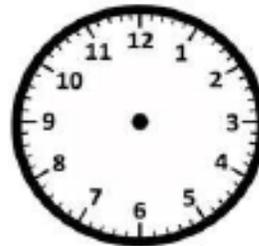
Time: 11:30

8)



Time: 7:30

9)



Time: 3:00

Draw the minute and hour hands on the following clocks.



10:05



10:35



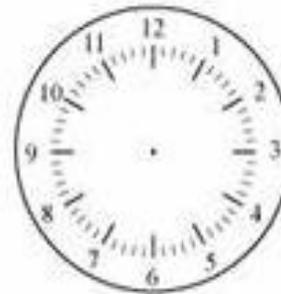
08:40



09:05



09:20



09:25



09:55



02:30



05:45

Showing the Time on a Clock

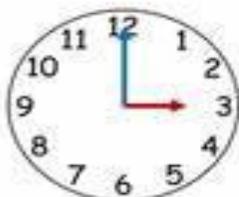
Directions: Look at the clocks below. Draw the hands correctly to show the digital time below each clock.
Hour → Minute →

1.  <u>4:00</u>	2.  <u>5:30</u>	3.  <u>6:00</u>
4.  <u>11:30</u>	5.  <u>10:00</u>	6.  <u>9:30</u>
7.  <u>12:30</u>	8.  <u>9:00</u>	9.  <u>12:00</u>
10.  <u>1:30</u>	11.  <u>2:00</u>	12.  <u>7:30</u>

LO: To tell the time using the hour and minute hands.

Success Criteria:

- 1 - I can show different o'clock times on my clock.
- 2 - I can write what time is shown on the clock.
- 3 - I can draw different o'clock times using red for the hour hand and blue for the minute hand.



__ o'clock



__ o'clock



__ o'clock



1 o'clock



4 o'clock



8 o'clock

Extension: I can draw and write my own times on the clocks.



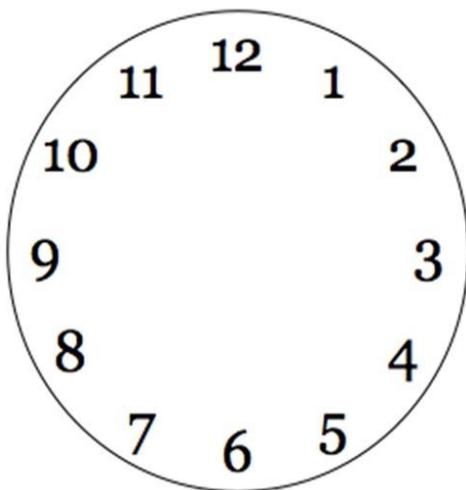
Name: _____ Date: _____

Telling time Worksheet

Draw the hands on the clock.

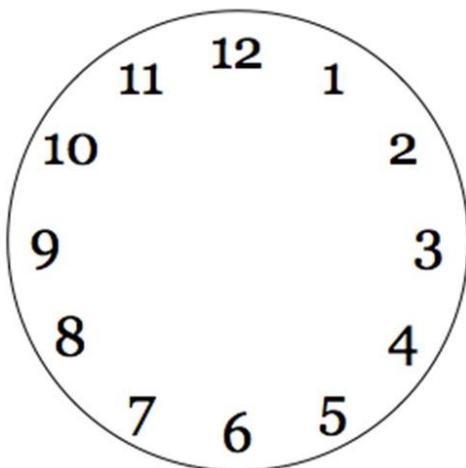
1 a.  7:30	1 b.  2:00	1 c.  10:00
2 a.  9:00	2 b.  11:30	2 c.  8:00
3 a.  5:30	3 b.  2:30	3 c.  4:00
4 a.  5:00	4 b.  10:30	4 c.  6:00

Let us continue to practice some more.



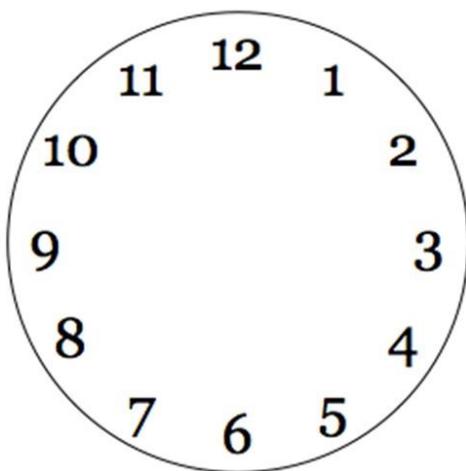
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

1:35



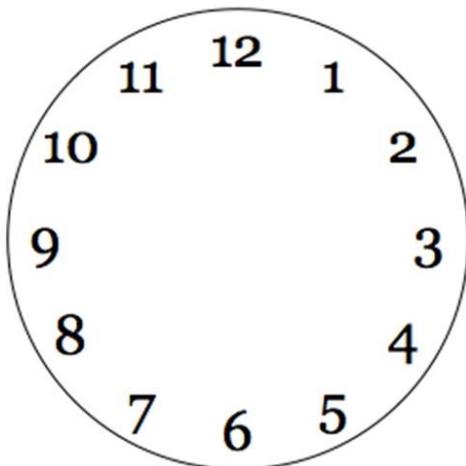
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

11:15



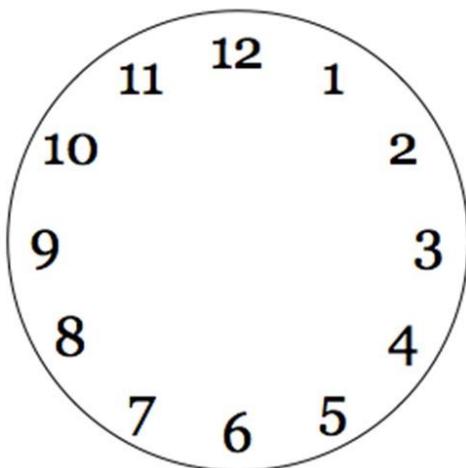
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

2:20



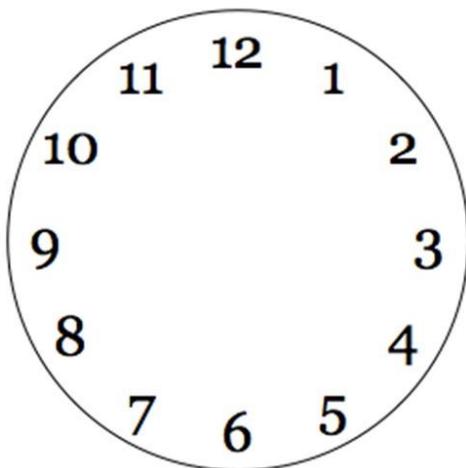
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

8:05



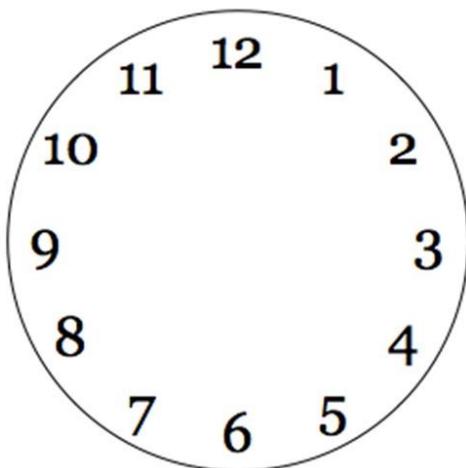
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

6:50



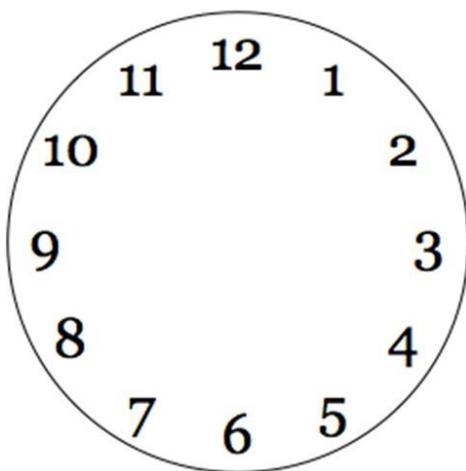
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

3:25



Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

10:55



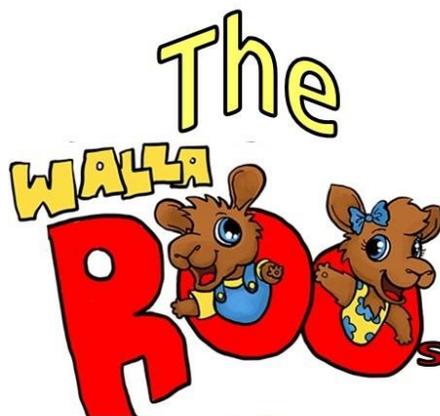
Let's write the correct Hour Hand and Minute Hands on the Clock for the time below

12:00

Wow You Just Learned A lot!!!

**Do not stop, keep doing your best and
learning all that you can.**





Youth Learning and Adventures LLC