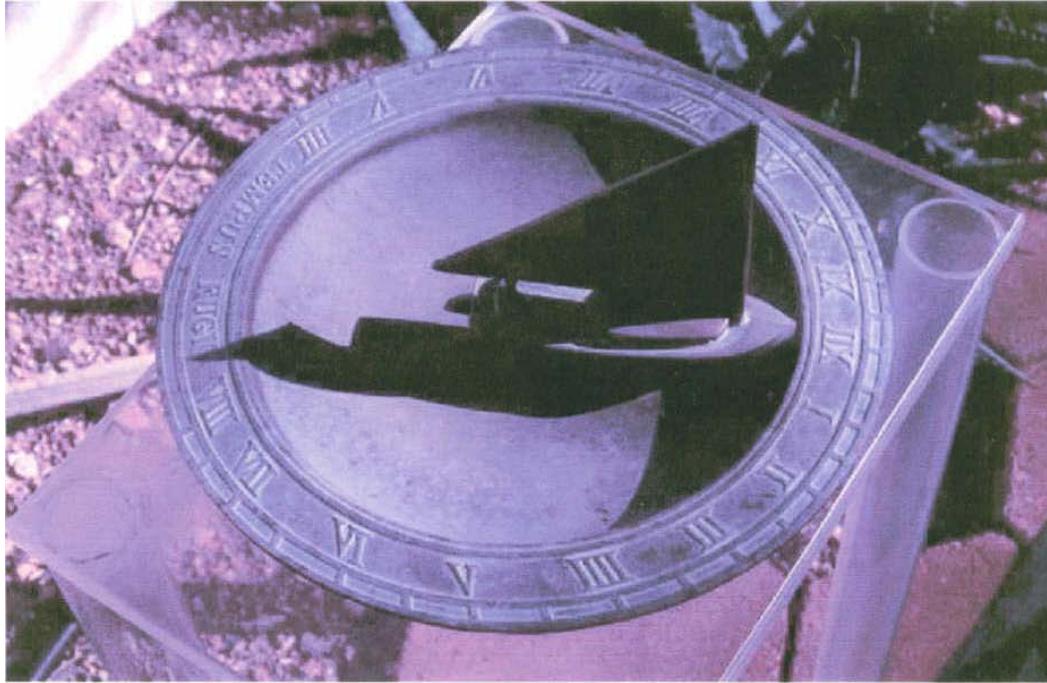


**When working with minutes, tell the child to "count by 5 forward" for "AFTER" and "count by five backwards" for "TO" for each number on the clock. I found this simple instruction to help my own son tremendously. I recommend you make sure your child is able to at least count by 5 and understands the concept of "forward" and "backward" before tackling the concept of teaching time.**

# Breaking The Code



## To Time

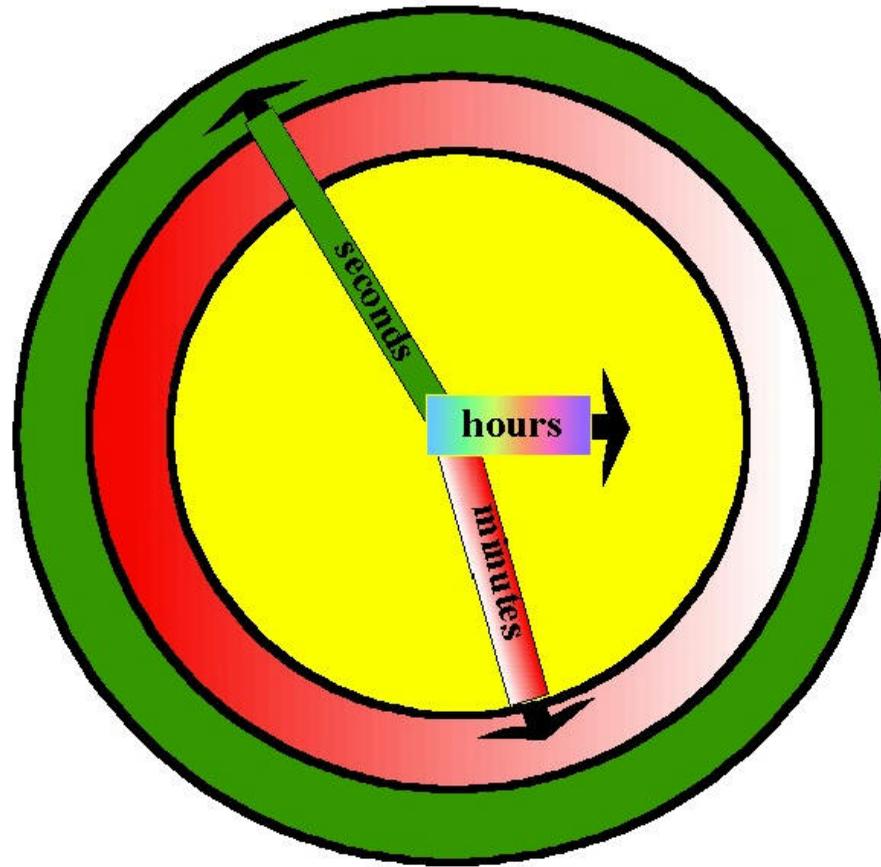
By: Jeanne A. Brohart  
Autismhelpforyou.com  
Copyright 2003

# Note To Parents

This set of cards includes concept,  
example and practice cards  
for teaching time.

Some children may only need the FINAL  
clock whereas others may need to take a  
slower approach to each concept. These  
cards were produced to provide parents the  
flexibility they need in teaching the  
concept of time based on the child's  
individual needs.

# Telling Time



**A clock has 3 hands**

Short Hand = Hours



Medium Hand = Minutes

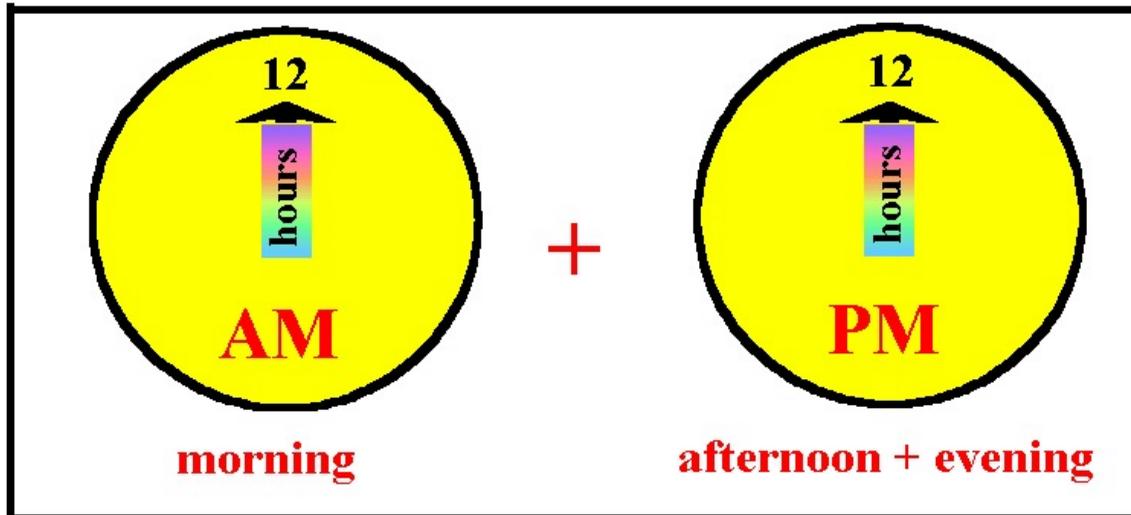


Long Hand = Seconds



# To Understand Time...

You Need To Put 2 Clocks Together...



**AM + PM = 1 Day**

Short Hand = Hours



The **HOUR hand** is the **most important hand** on a clock. It is the **shortest**. It moves the **slowest**.

We Have: 12 AM Hours (morning)  
+ 12 PM Hours (afternoon and evening)  
  
= 24 HOURS = 1 DAY

**Before we can put them  
together...**

**you need to understand the  
difference between**

**the **AM** clock...**

**and the **PM** clock...**

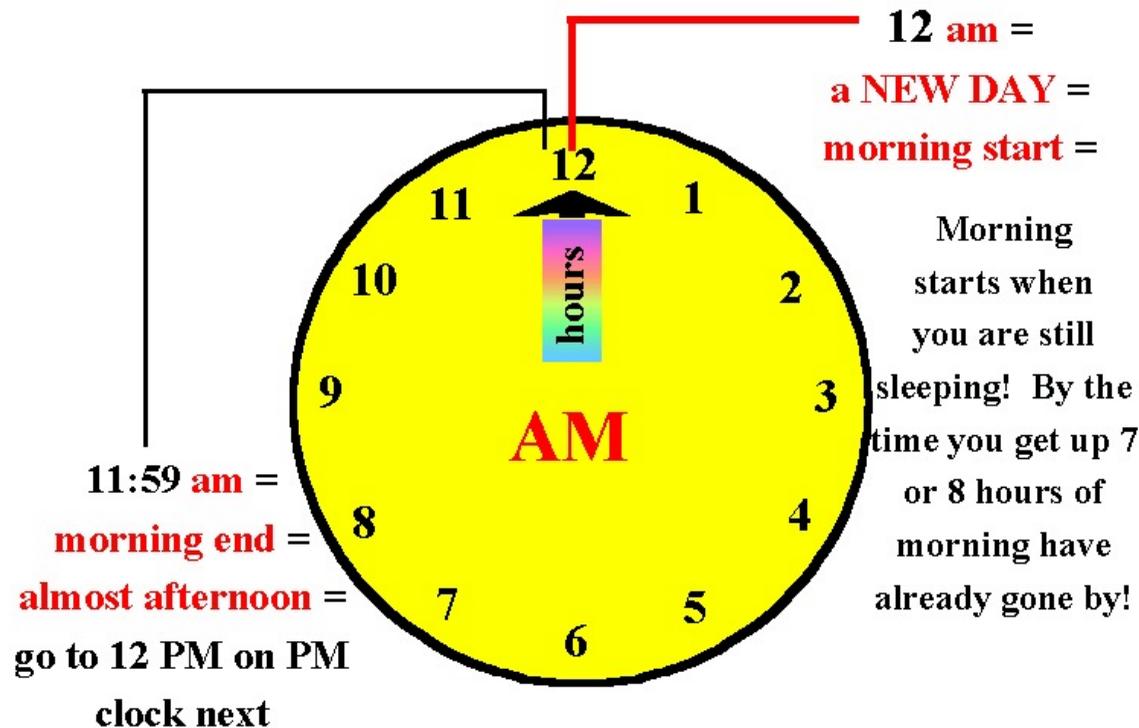
# The **AM** Clock... Is The **Morning** Clock!

Short Hand = **AM** Hours



We Have **12** AM hours (1 to 12)

**12 AM = 12:00 am = Morning Start = Midnight =  
A NEW DAY**



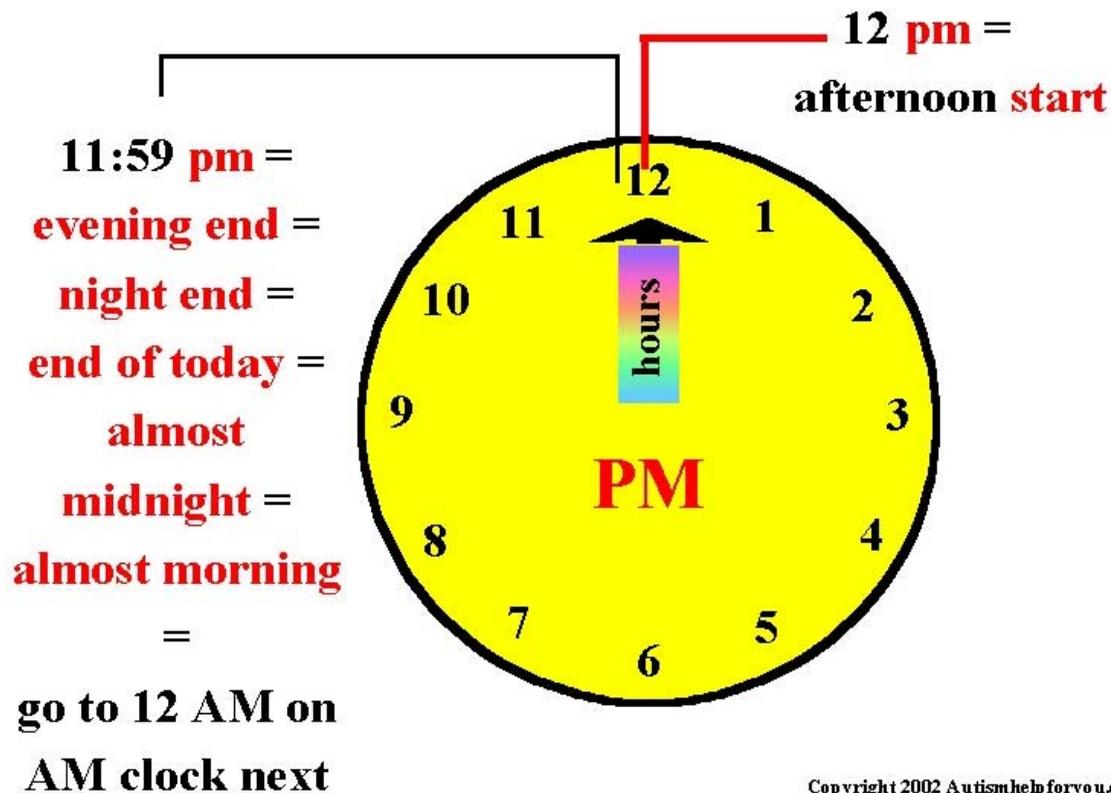
# The **PM** Clock ... Is The **Afternoon + Evening** Clock!

Short Hand = **PM** Hours



We Have **12** PM hours (1 to 12)

**12 pm = 12:00 pm = Afternoon Start = Lunchtime  
= 12 NOON**

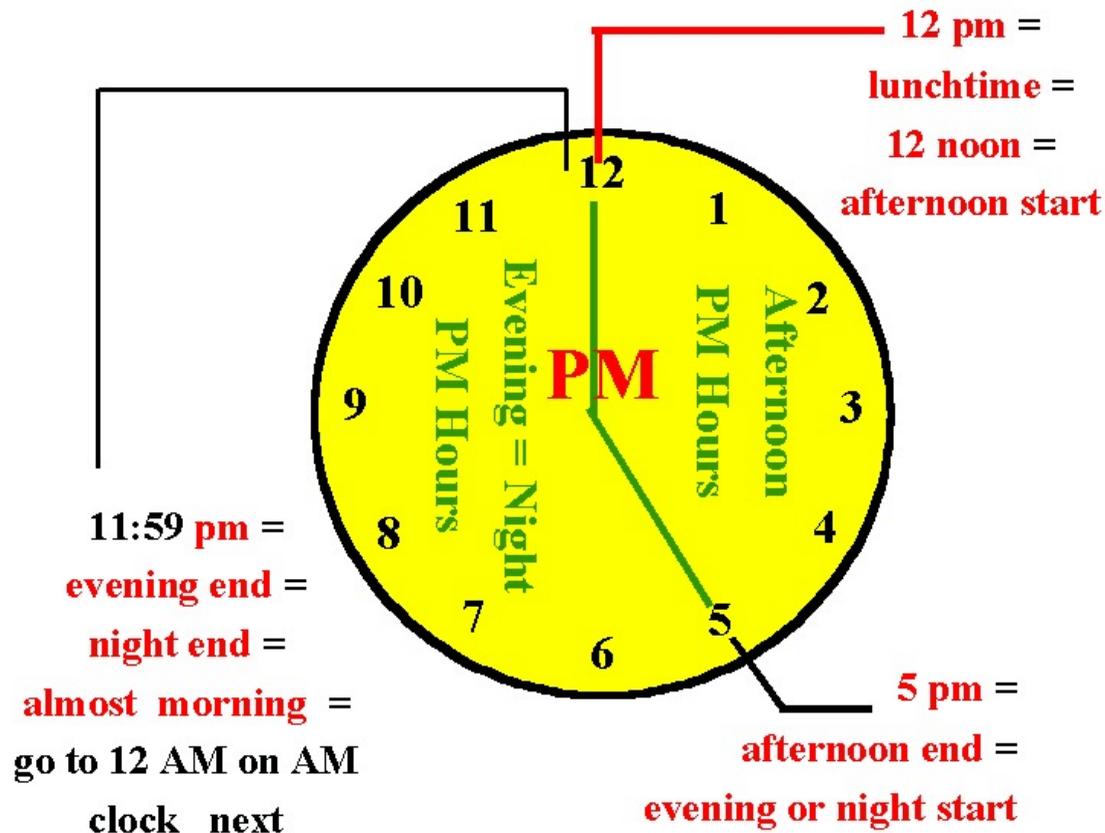


# The **PM** Clock ... Is The Afternoon + Evening Clock!

We Have **12** PM Hours

**12 PM to 5 PM = afternoon** hours

**5 PM to 11:59 PM = evening or night** hours



**We have 12 AM hours + 12 PM hours  
= 24 hours = 1 day...**

**The AM clock is always followed by the PM  
clock...and**

**The PM clock is always followed by the AM  
clock...**

**Just keep going... AM, then PM, then AM,  
then PM, then AM, then PM - and so on...**

**So to understand time, you first need to know  
if it is AM or PM...**

**To make it easier, some people just count all  
the way to 24 instead of using the  
12 pm hours...**

# The **24 Hour Clock** = **12 AM + 12 PM Hours** **Added Together!**

**12 AM hours + 12 PM hours = 24 hours = 1 Day**

**12 AM hours = 1 to 12**

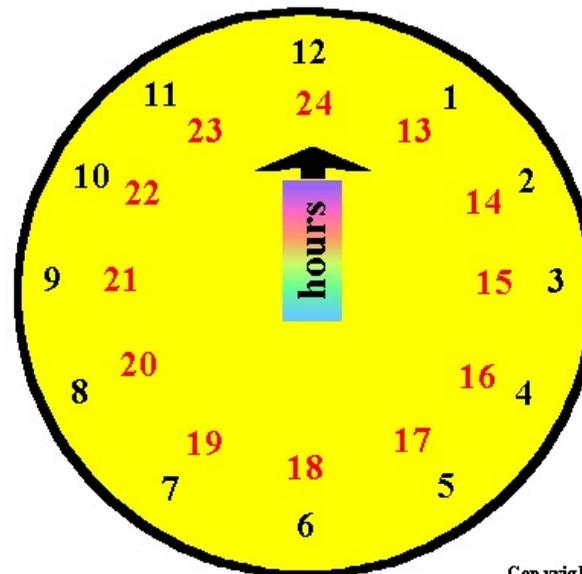
**12 PM hours = 13 to 24**

**1 to 24 = 1 day**

The hour hand  must go around **2** times to  
make **1** day...

**one time for AM hours and one time for PM hours!**

Although a  
lot of clocks  
show 24  
hours, **most**  
people don't  
tell time using  
**24** numbers...



Most people  
**use only 12**  
**numbers**  
to tell time  
and just  
**remember**  
if it's  
**AM or PM!**

**Since most people use a 12 hour clock, that is  
what we will use  
in the examples that follow...**

**Now that you understand how the small  
hand for HOURS works,  
we will see how  
the medium hand for  
MINUTES works...**

# Minutes...

All clocks have **60 minutes** (1 to 60)

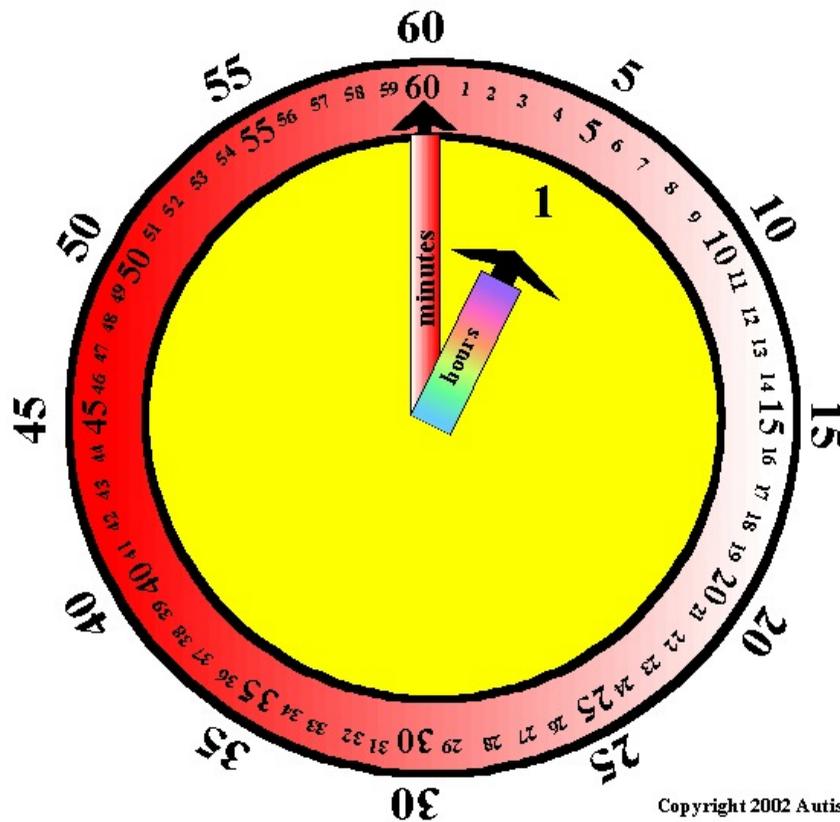
Most clocks don't show all these numbers, but some clocks count minutes by 5

**60 minutes = 1 hour** or **1 hour = 60 minutes**

**EACH hour has 60 minutes**

So, the minute hand must touch each of the 60 numbers 1 time for the hour hand to move by only 1 number! If you count slowly to 60, that is about 1 minute... or 1 number on this clock.

You would need to count to 60 a total of 60 times to make one hour!



# Minutes... "After"

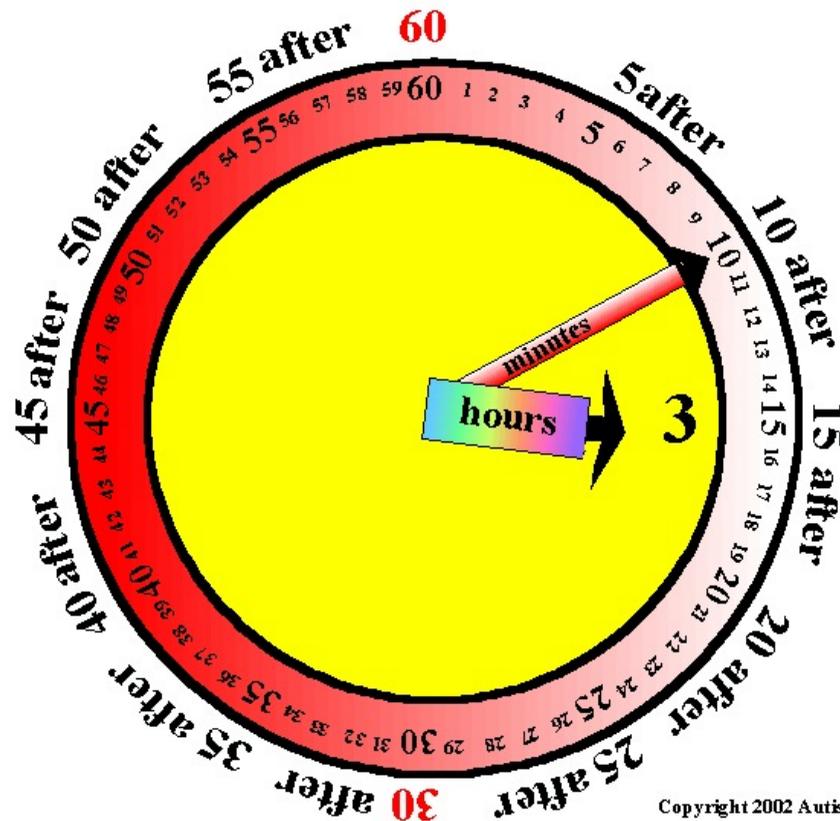
All clocks have **60 minutes** (1 to 60)

Most people tell time using minutes counted by 5 and don't worry about the "in between" numbers.

There are different ways to tell time using minutes...

One of the most common ways is to use the word "**AFTER**" after the minute number to indicate it is that many minutes after the number just passed by the hour hand. You can use the word "After" for **almost** all numbers when reading the minutes on a clock.

On this clock, it is **10 after 3**.

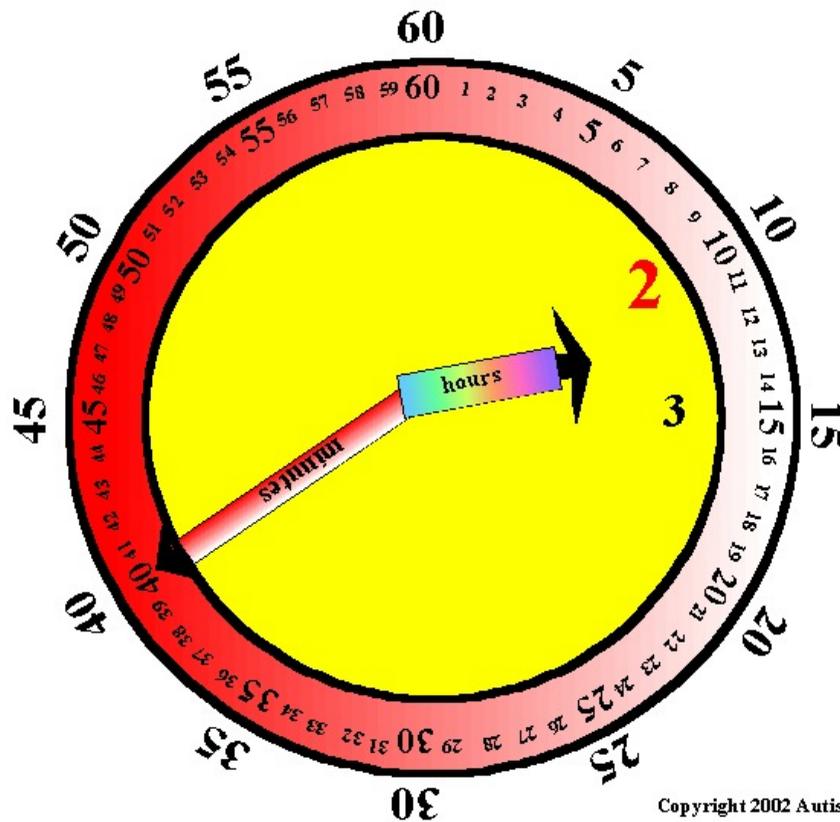


# Minutes...

Lots of people don't use the word "after" when telling time. They say the **hour just passed and the minutes.**

On this clock, they would just say that it is 2:40 because it is 40 minutes passed 2...

Notice the hour hand has not reached the 3 yet!

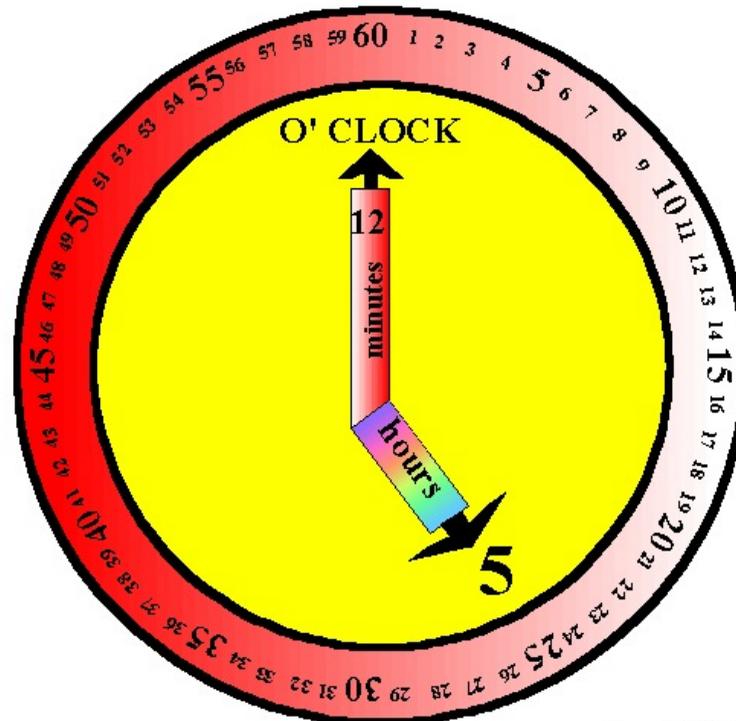


# Minutes... O'Clock

There are times when you don't use the word "after".

Whenever the **minute hand** is on the 60, you say the number on the **hour hand** followed by the word "O'CLOCK". You **always** use the word "**O'CLOCK**" when the **minute** hand is pointing **straight up**. On most clocks, since minutes are not shown, this is when the minute hand points **to the number 12**.

On this clock, it is **5 o'clock**, or **5:00 o'clock**... say the hour hand number first, then the word "o'clock".



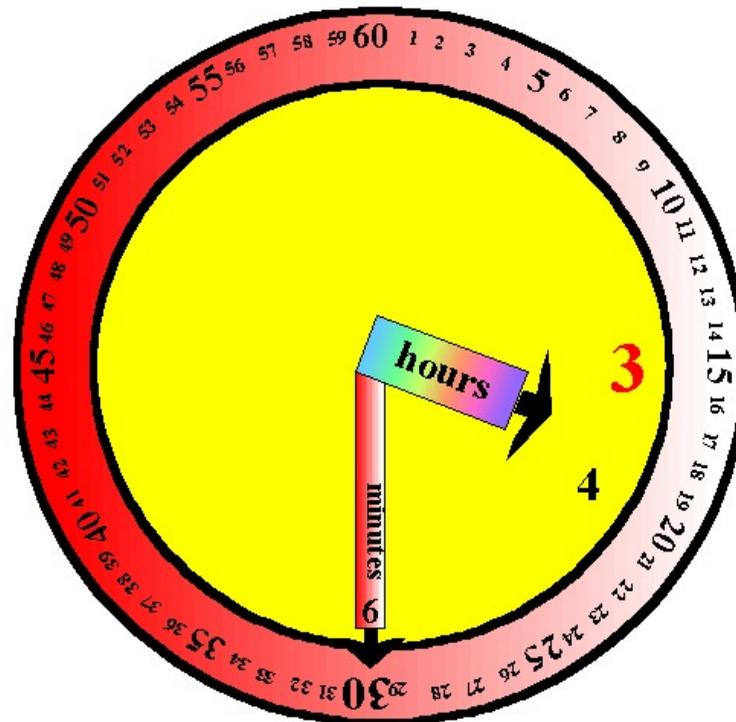
# Minutes... 30

You don't use the word "after" when the minutes hand is on the **30**.  
Since minutes are not shown on most clocks, this is when the minute hand points straight down, **to the number 6**.

You always say 30 when the minutes hand is pointing straight down to the 6.

You just **say the hour** the hour hand just passed and the number **30**.

On this clock, it is **3:30**.



# Minutes...

A lot of people split the clock in half to tell time  
when reading minutes on a clock...

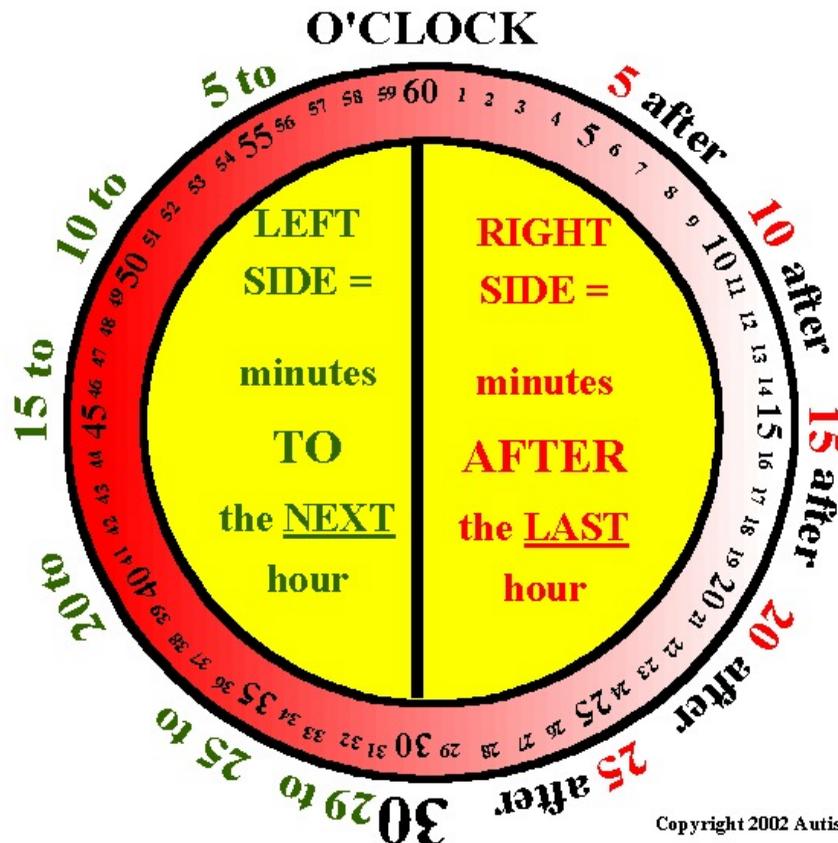
The **RIGHT HALF** = **AFTER** (1-30 after)

The **LEFT HALF** = **TO** (1-29 to)

**AFTER** = how many minutes after the hour just past

**TO** = how many minutes before the next hour

There are only **29** minutes **TO** on a clock.





# Minutes... Quarters

Some people split a clock in quarters when they read the minutes on a clock....

**15 MINUTES = ONE QUARTER = 1/4**

the only quarters people really use are:

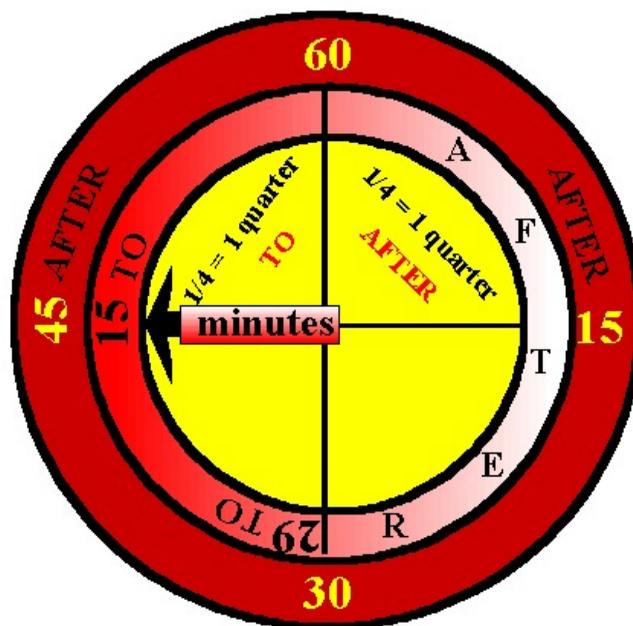
**1/4 AFTER = 15 minutes AFTER the hour**

**1/4 TO = 15 minutes TO the next hour = 45 AFTER**

**1/4 = ONE QUARTER**

1/4 TO = 15  
minutes TO  
the NEXT  
hour

1/4 TO =  
45 AFTER



1/4 AFTER =  
15 minutes  
AFTER the  
LAST hour  
just passed

Remember: There are **only 29 TO minutes** on a clock....

and they are **only on the LEFT half** of the clock...

otherwise, you talk in minutes AFTER...

**When reading minutes, you can read them  
a lot of ways...**

**MINUTES AFTER...**

using **1 through 60** and going **all around the clock**

**MINUTES TO...**

using **1 through 29** for just the **LEFT** half of the clock

**and in**

**QUARTERS...**

**1/4 AFTER = 1 QUARTER AFTER =  
15 minutes AFTER the last hour**

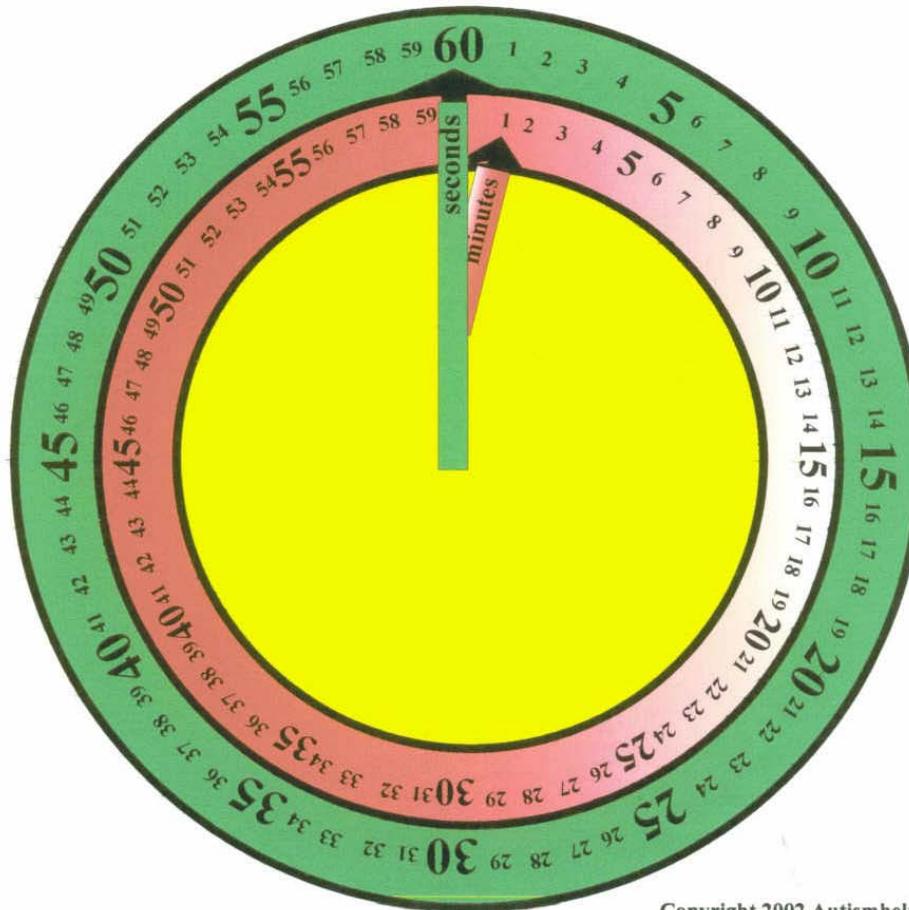
**1/4 TO = 1 QUARTER TO =  
15 minutes TO the NEXT hour  
= 45 minutes AFTER the LAST hour**

**(remember that TO minutes are ONLY on the LEFT  
half of the clock)**

# Seconds...

All clocks have **60 SECONDS** although many clocks do not actually show these numbers because the **Second Hand** is the **LEAST** important on a clock. Very few people ever read the time using seconds. Instead they use only Hours and Minutes. If you count to 1 slowly, that is about 1 second.

**60 seconds = 1 minute**



# Digital Clocks...

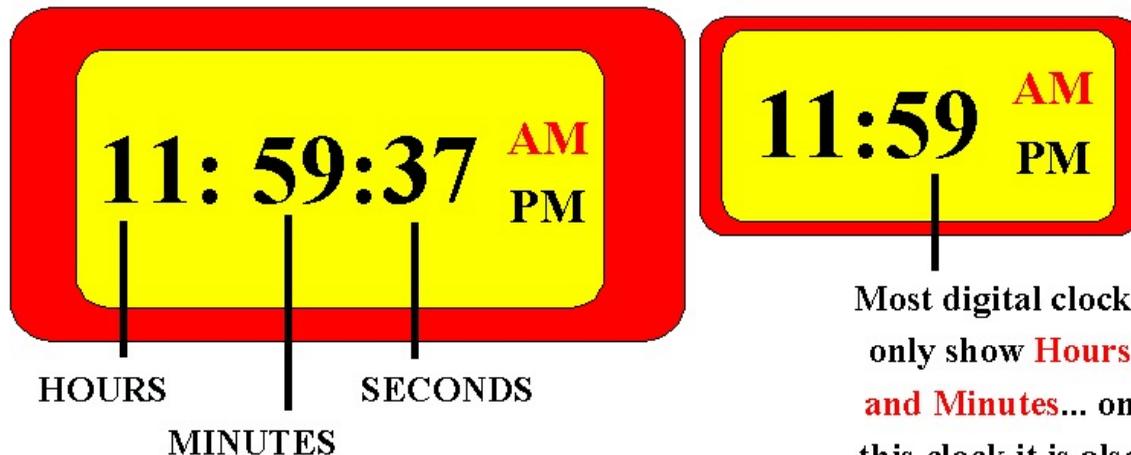
Some people use digital clocks...  
these are the easiest to use...

**HOURS** = **FIRST 2** numbers

**MINUTES** = **NEXT 2** numbers

**SECONDS** = **LAST 2** numbers

They often have an AM or PM indicator... but not always!



The time on this clock is 11 (hours) 59 (minutes) and 37 seconds. Most people would just say this as **eleven fifty nine AM**.

60 seconds - 37 seconds = 23 seconds and so in 23 seconds, it will be 12:00 pm or noon... and that is **lunchtime!**

Most digital clocks only show **Hours and Minutes...** on this clock it is also 11:59 am or 1 minute **before** 12 noon.

**AM**

**=**

**MORNING**

**PM**

**=**

**AFTERNOON +  
EVENING**

**AM + PM**

**=**

**1 DAY**

$$\begin{aligned} & \mathbf{12\ AM\ Hours} \\ & + \mathbf{12\ PM\ Hours} \\ & \\ & = \mathbf{24\ HOURS} \\ & \\ & = \mathbf{1\ DAY} \end{aligned}$$

**24 HOURS**

**= 1 DAY**

**1 HOUR = 60 MINUTES**

**1 MINUTE = 60 SECONDS**

**1 HOUR = 60 MINUTES**

**1 MINUTE = 60 SECONDS**

**SHORT Hand = HOURS**

**MEDIUM Hand = MINUTES**

**LONG Hand = SECONDS**

**1/4**

**= ONE QUARTER**

**= 15 Minutes**

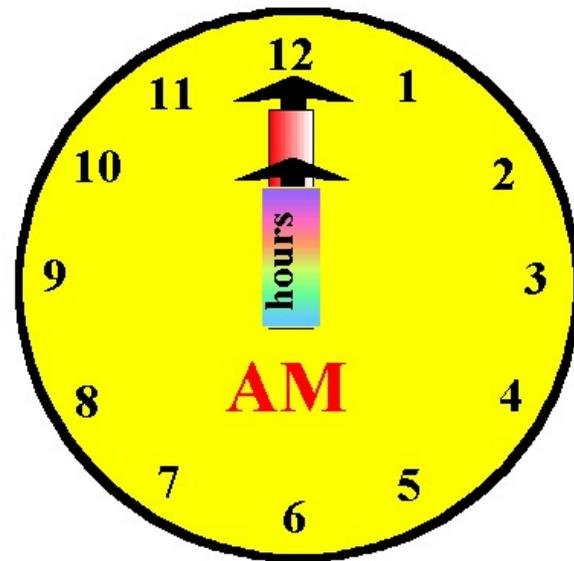
**12 AM**

**= 12:00 AM**

**= Morning Start**

**= Midnight**

**= A New Day**

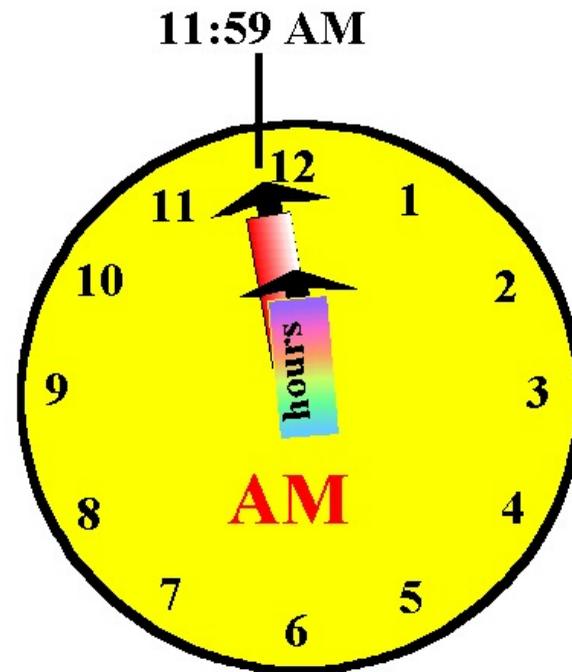


# 11:59 AM

= **Morning End**

= **Almost Afternoon**

= **Go To 12 PM on  
PM clock next**



**12 PM**

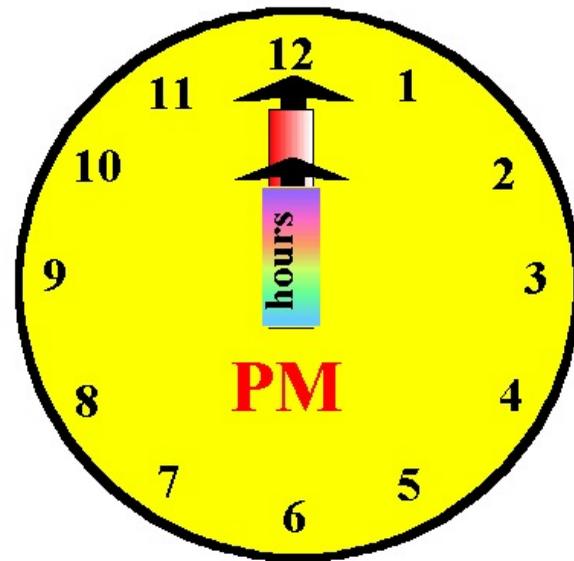
= **12:00 PM**

= **Afternoon Start**

= **Noon**

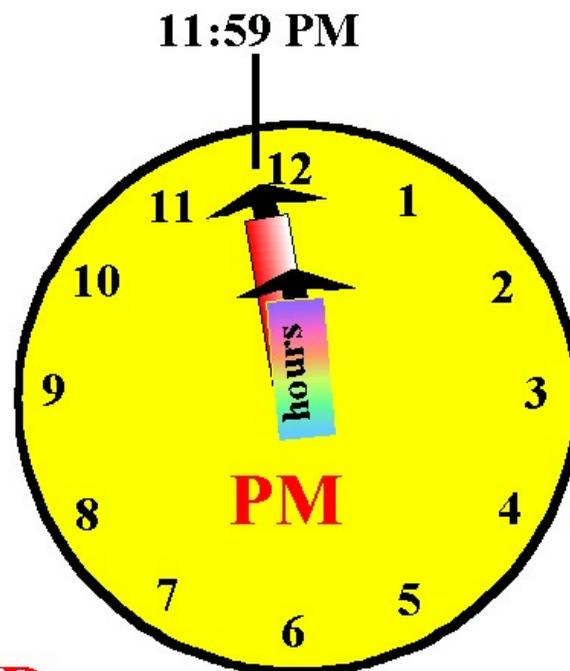
= **Lunchtime**

= **Mid Day**



# 11:59 PM

- = **Evening End**
- = **Night End**
- = **End of Today**



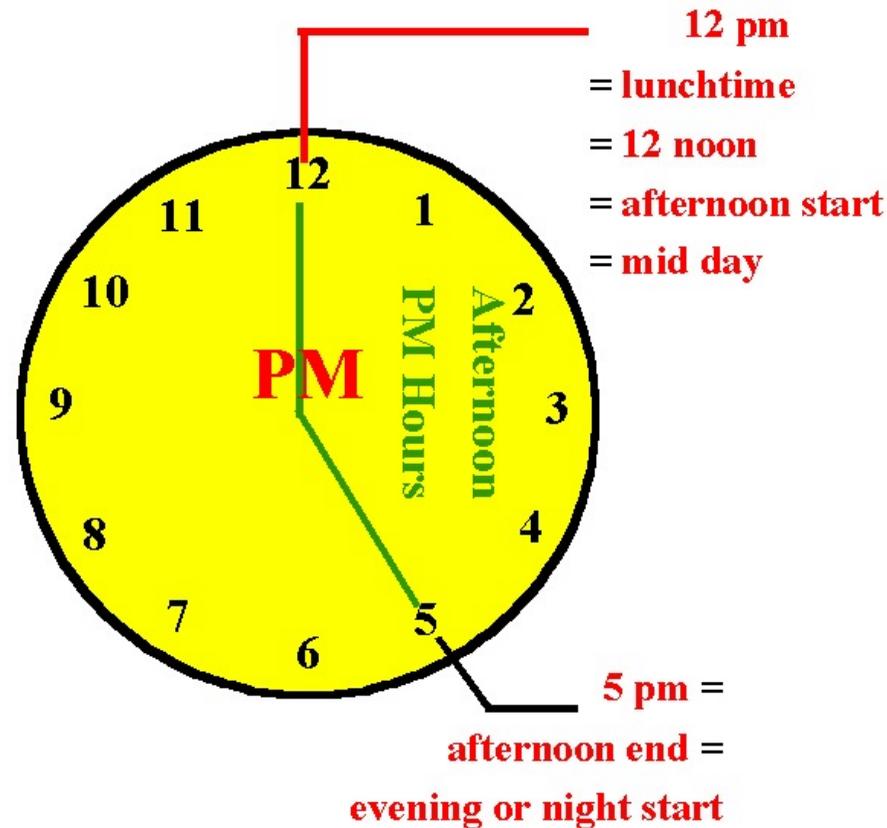
- = **Almost A New Day**
- = **Almost Midnight**
- = **Almost Morning**
- = **Go To 12 AM on AM  
clock next**

# AFTERNOON

= **12 PM to 5 PM**

= **12 o'clock to 5 o'clock**

= **12:00 to 5:00 PM**



# 5 PM

= **5:00 PM**

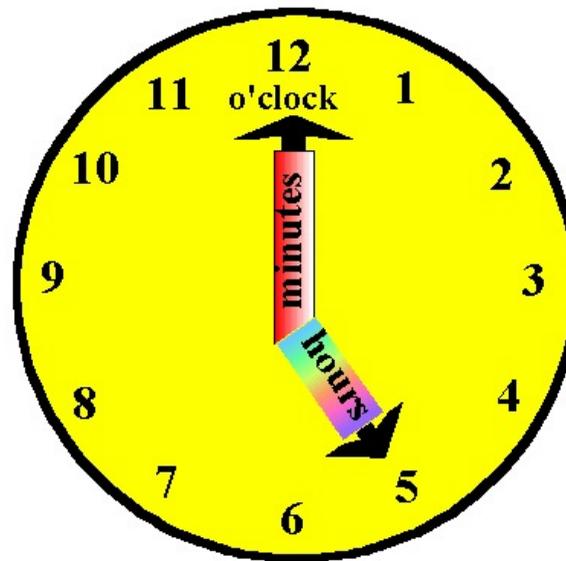
= **5 O'Clock**

= **End Of Afternoon**

= **Start of Evening**

= **Start of Night**

= **Supper or Dinner Time**



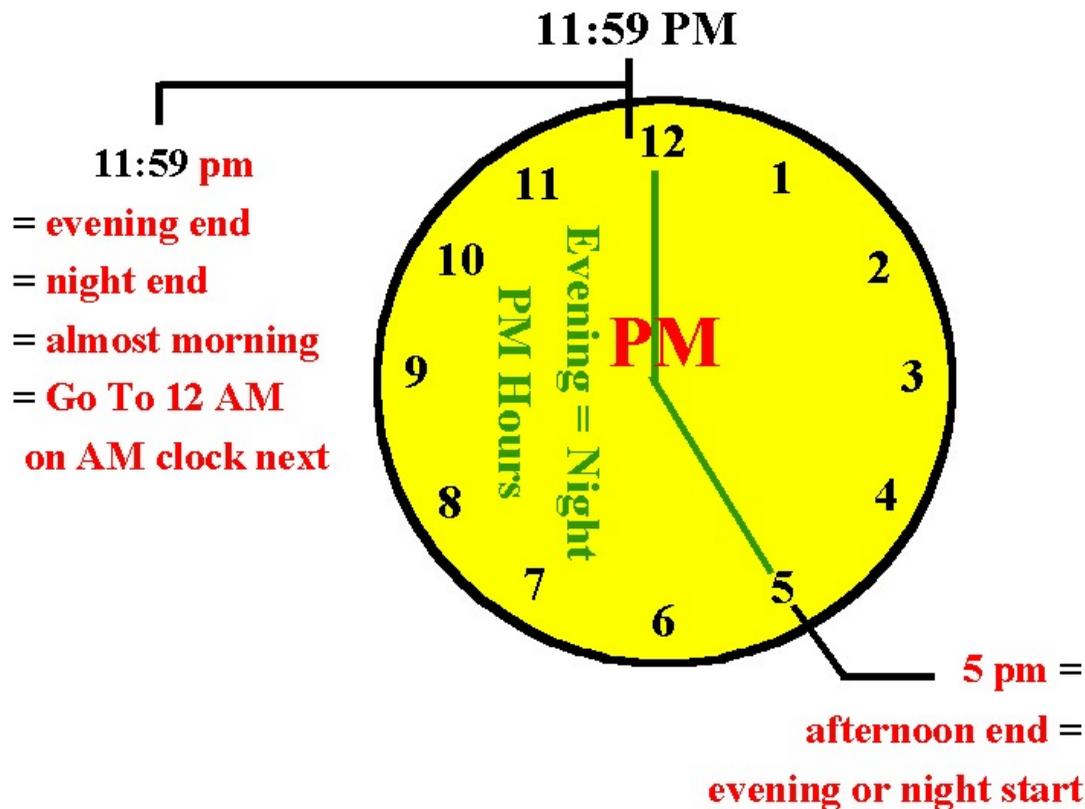
**PM**

# EVENING or NIGHT

= **5 PM to 11:59 PM**

= **5 o'clock to 11:59 PM**

= **5:00 to 11:59 PM**



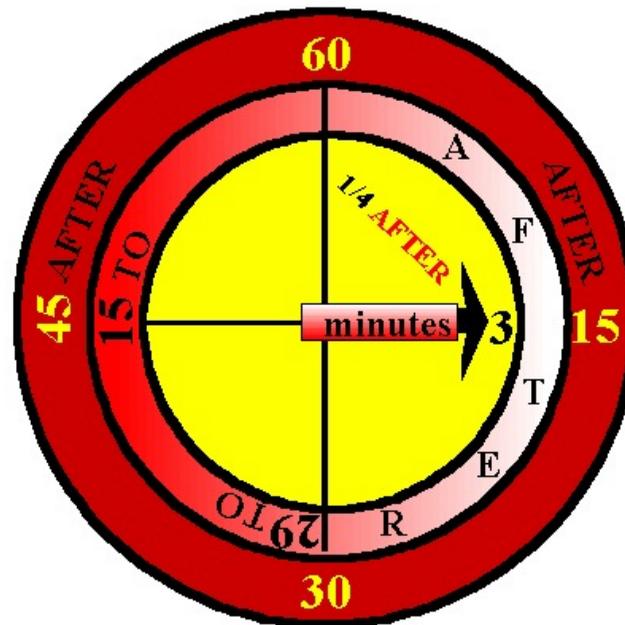
# 1/4 AFTER

**1/4 = ONE QUARTER**

**= One Quarter After**

**= 15 Minutes **After****

**The **LAST** Hour**



# 1/4 TO

1/4 = **ONE QUARTER**

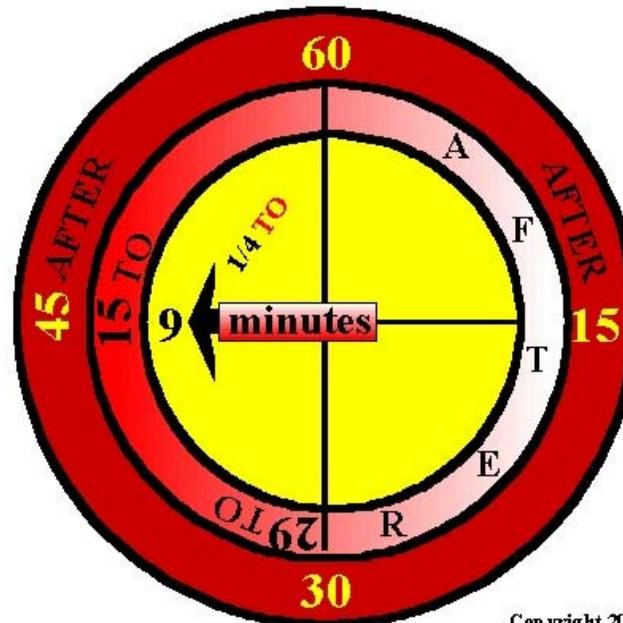
= **One Quarter TO**

= **15 Minutes TO (before)**

The **NEXT** Hour

= **45 Minutes After The**

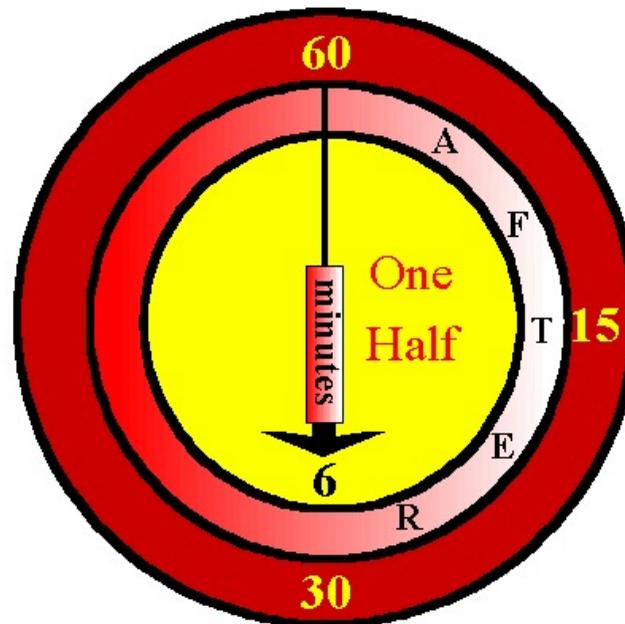
**LAST** Hour

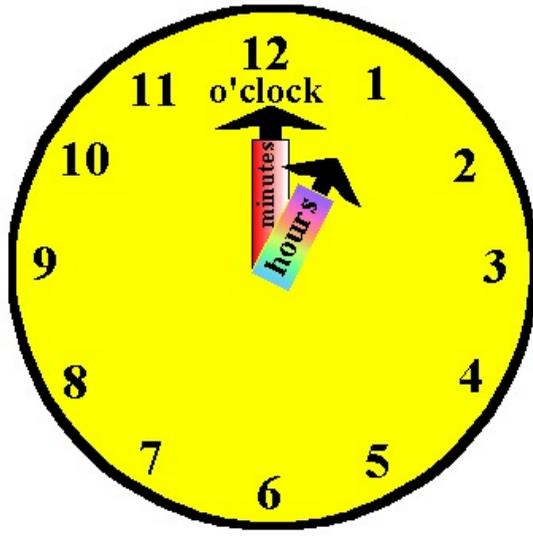


# 1/2 PAST

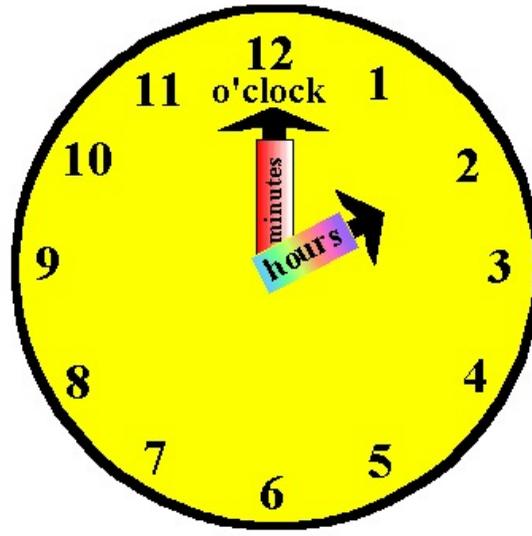
$1/2 = \text{ONE HALF}$

= **30 Minutes After**  
**The LAST Hour**

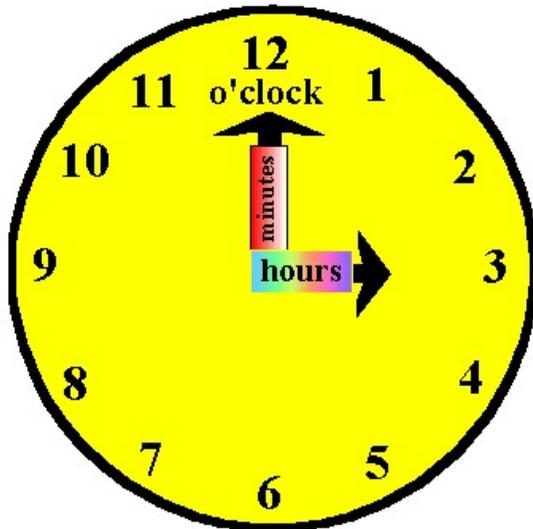




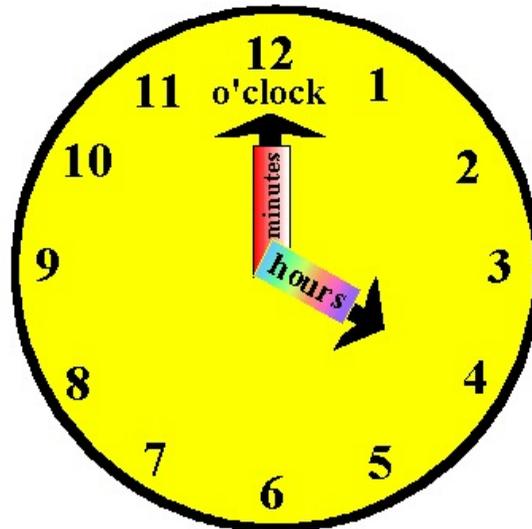
**1 o'clock = 1:00**



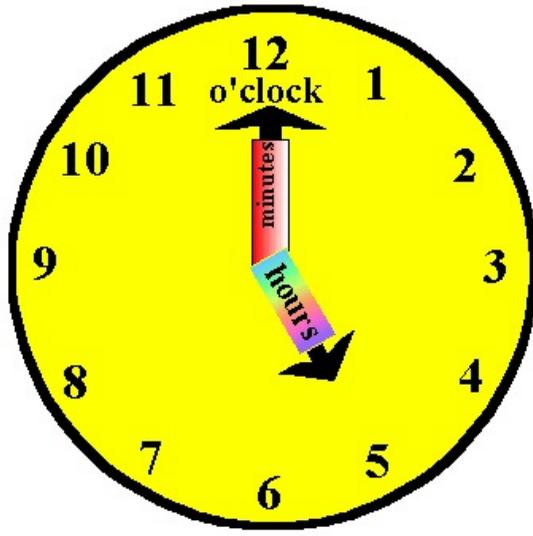
**2 o'clock = 2:00**



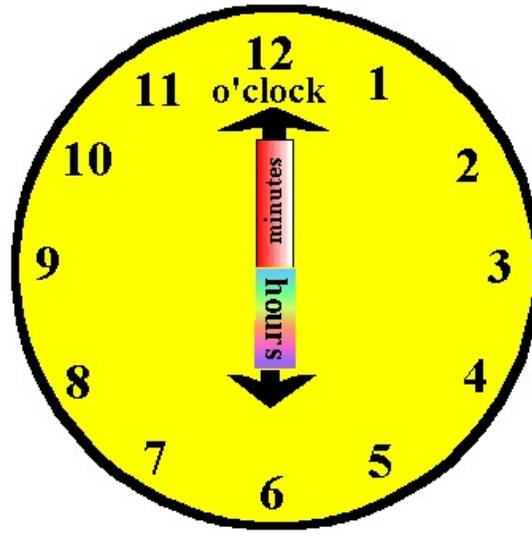
**3 o'clock = 3:00**



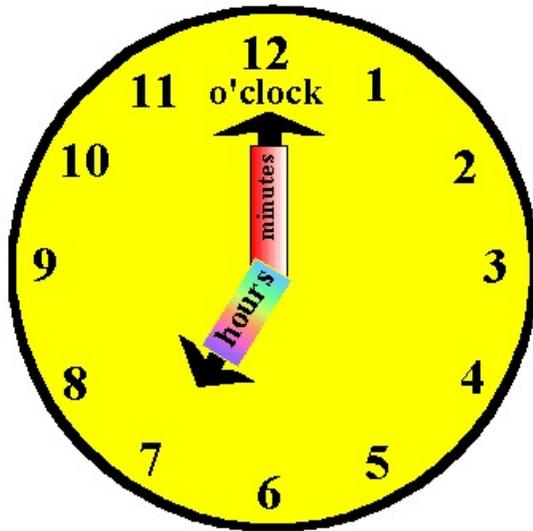
**4 o'clock = 4:00**



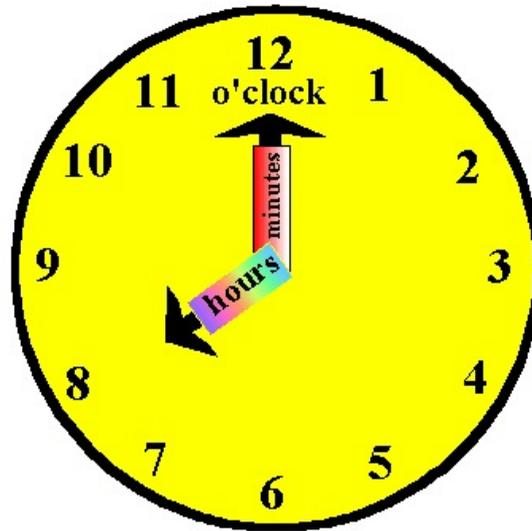
**5 o'clock = 5:00**



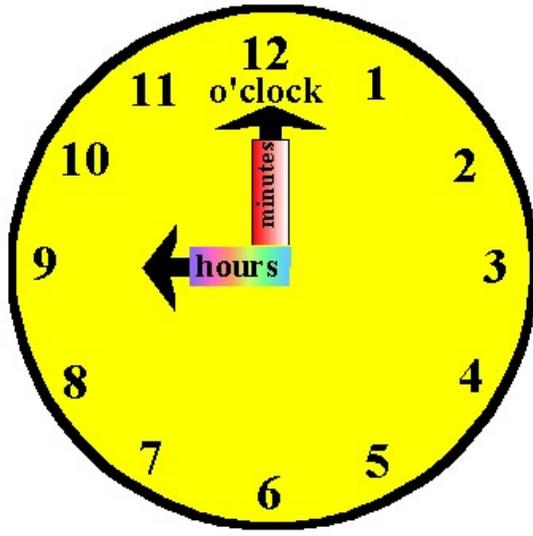
**6 o'clock = 6:00**



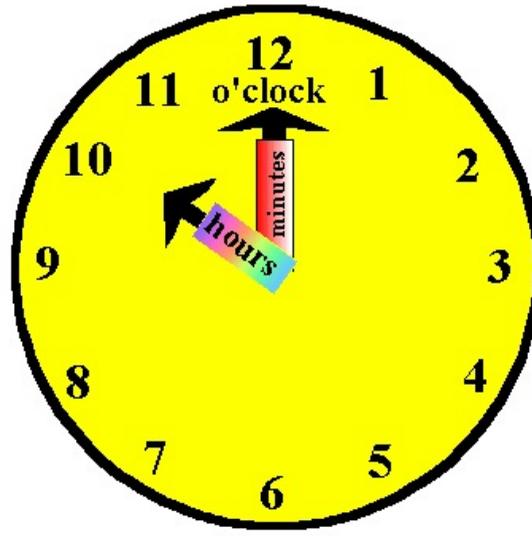
**7 o'clock = 7:00**



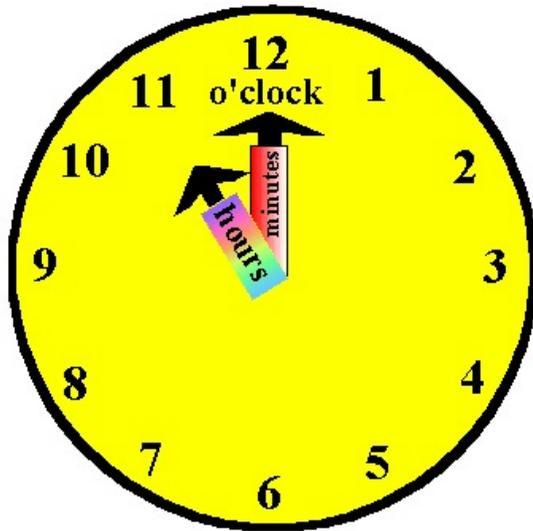
**8 o'clock = 8:00**



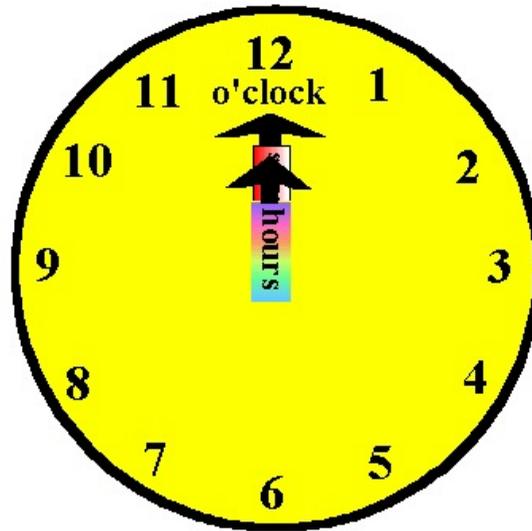
**9 o'clock = 9:00**



**10 o'clock = 10:00**

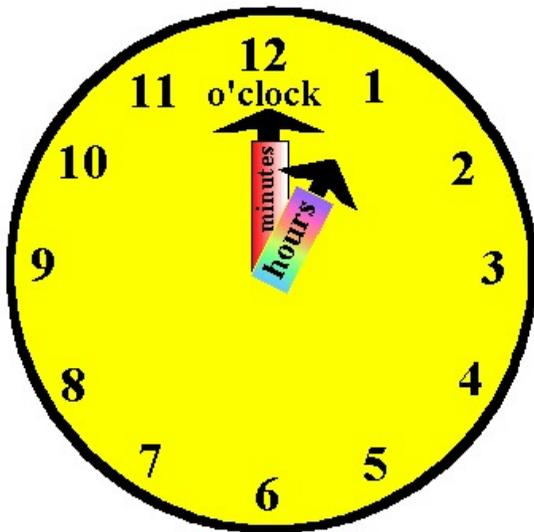
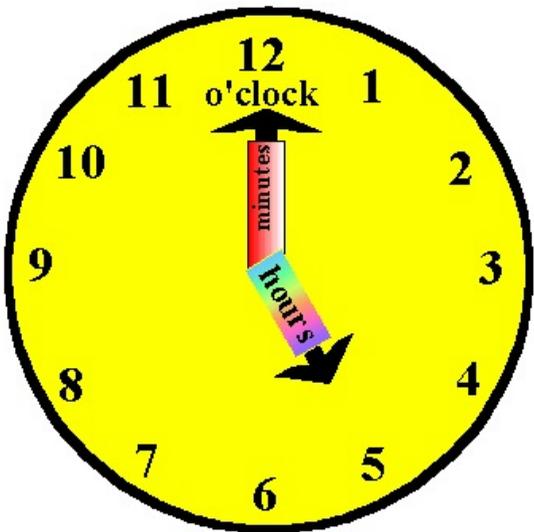
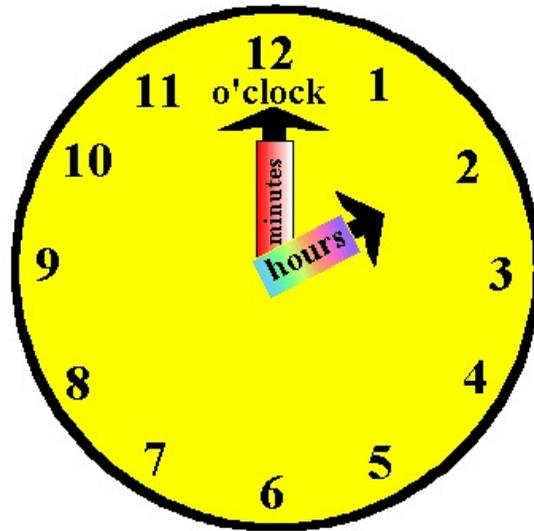
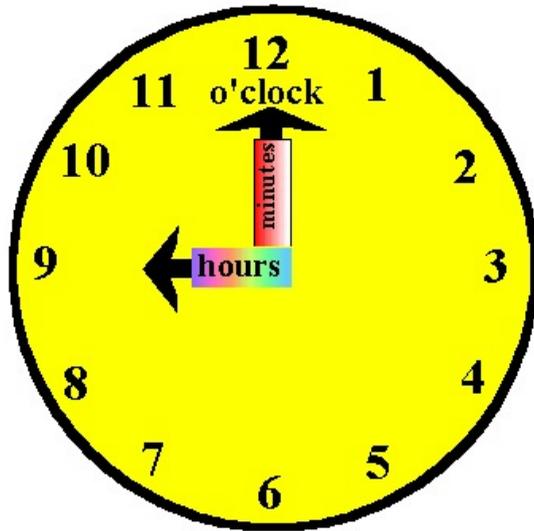


**11 o'clock = 11:00**

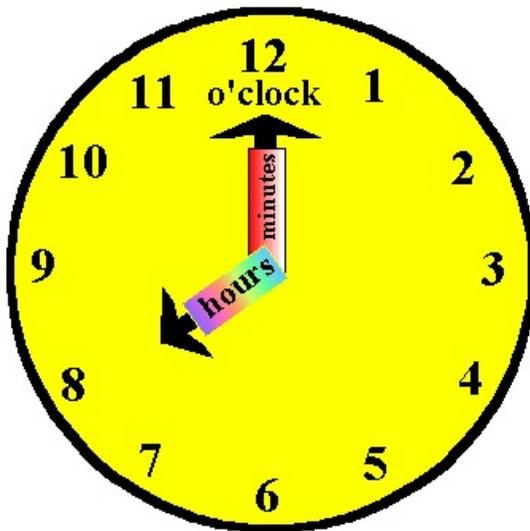
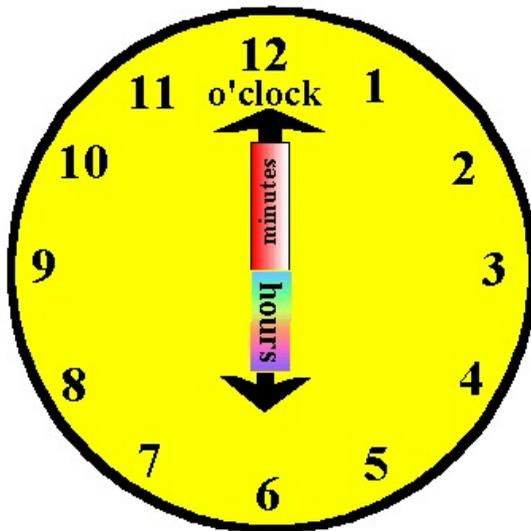
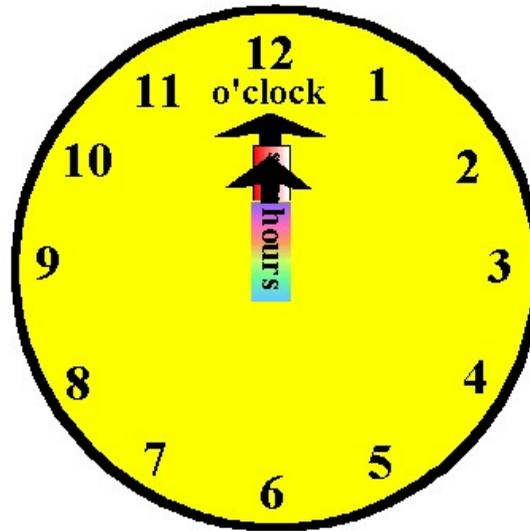
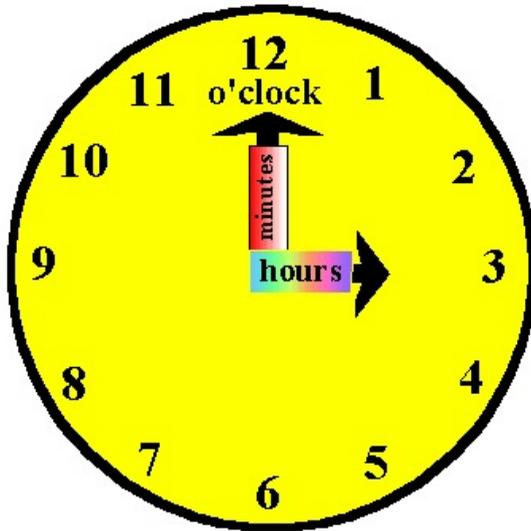


**12 o'clock = 12:00**

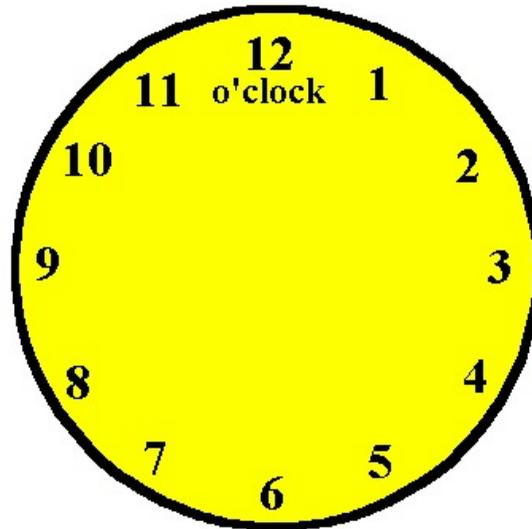
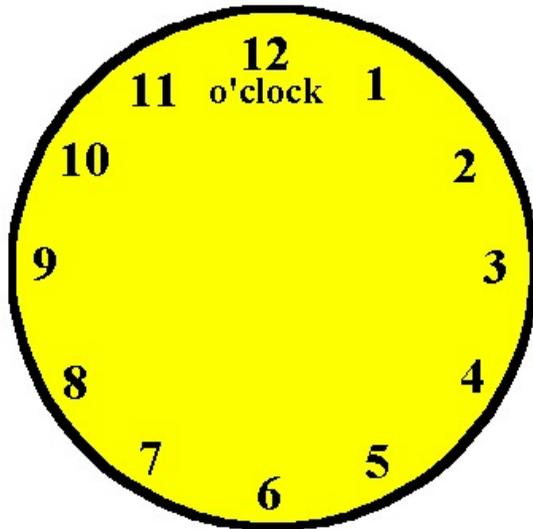
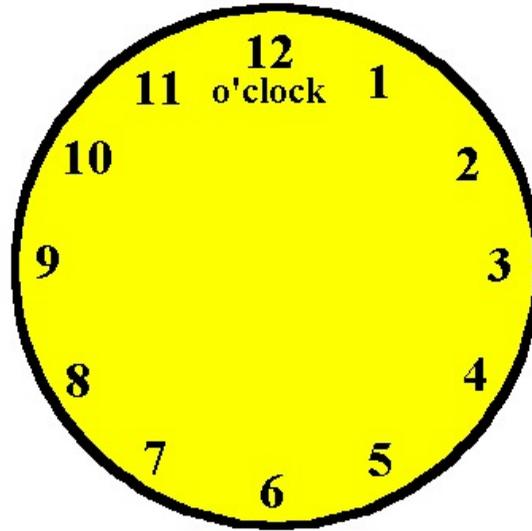
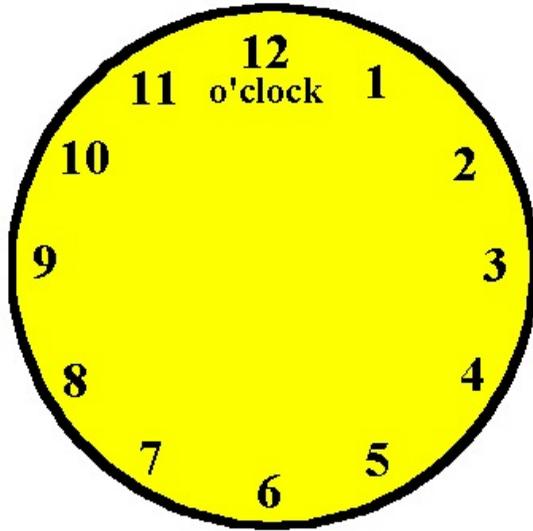
# What Time Is It?



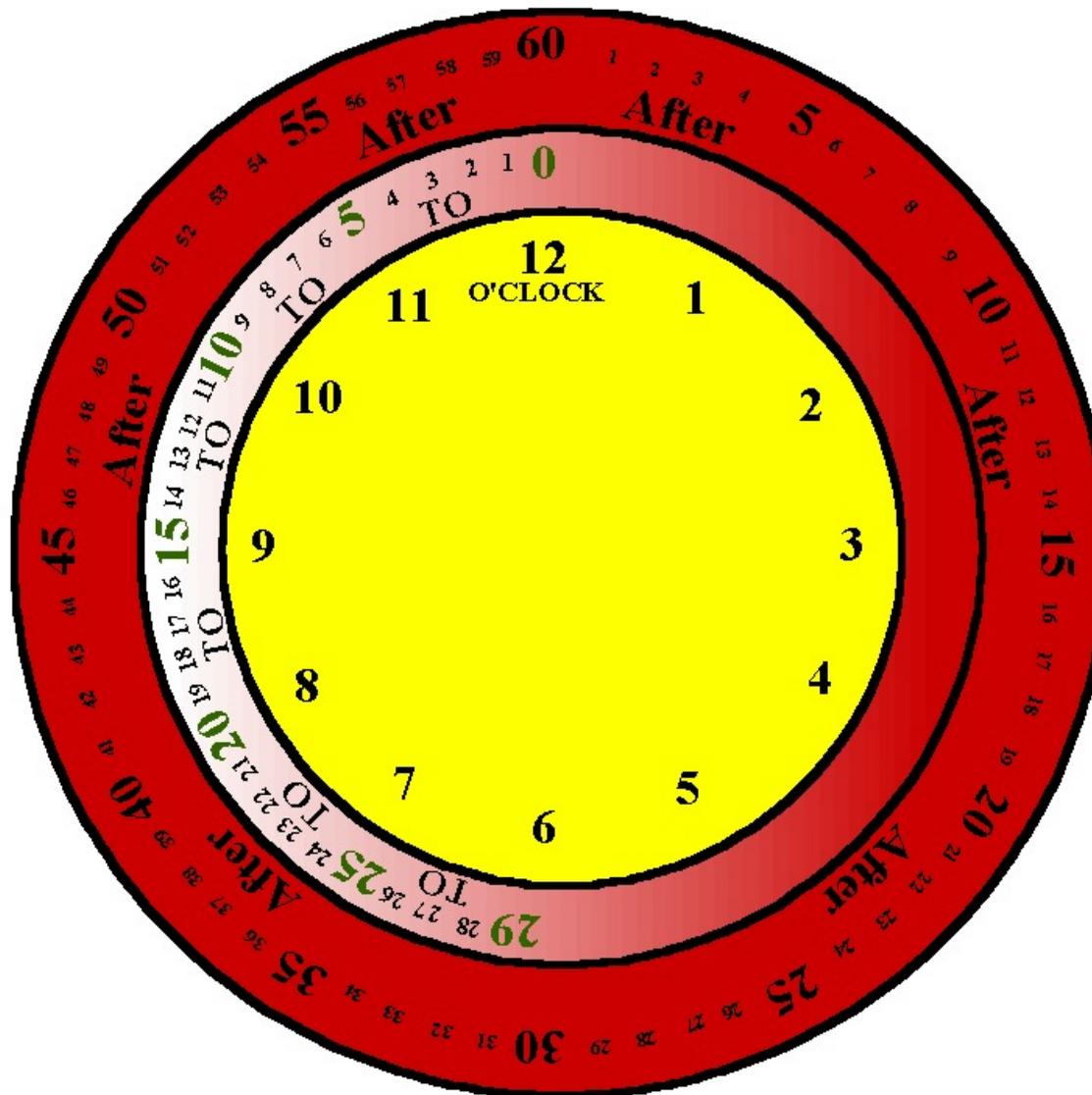
# What Time Is It?



# Practice Clocks...



# Reading Minutes...



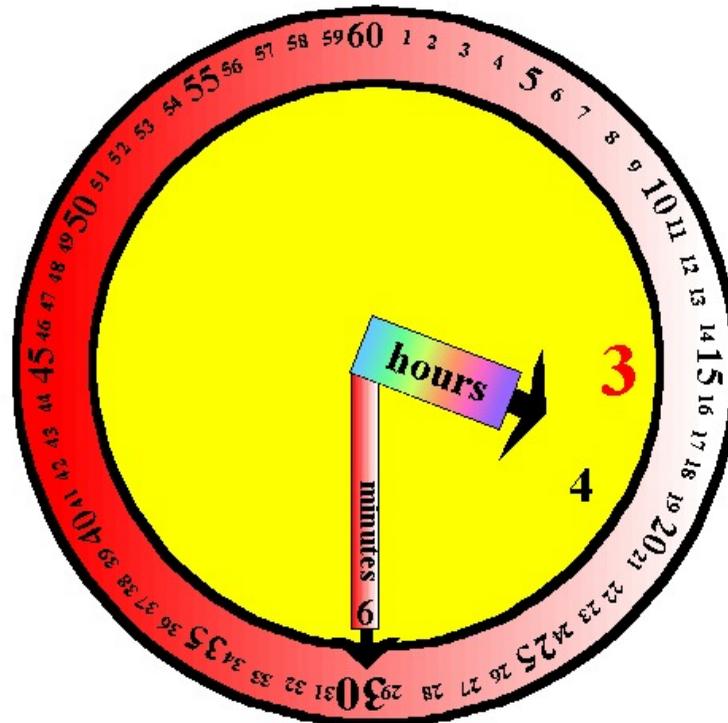
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

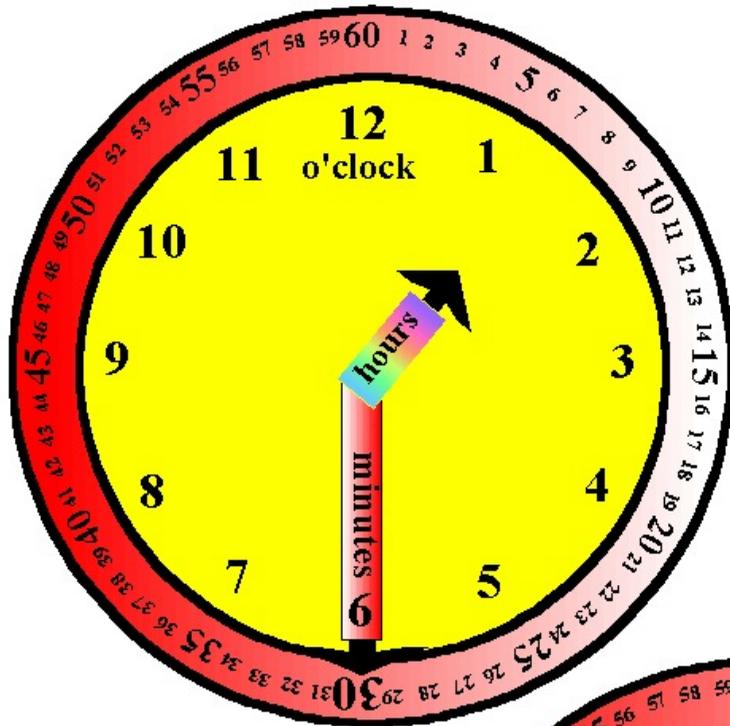
# Minutes... 30

You don't use the word "after" when the minutes hand is on the **30**. Since minutes are not shown on most clocks, this is when the minute hand points straight down, **to the number 6**.

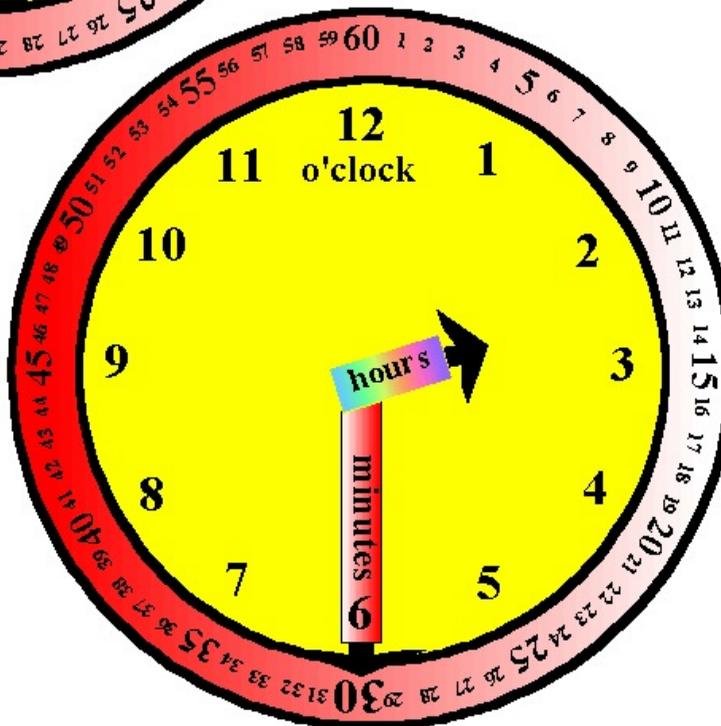
You always say 30 when the minutes hand is pointing straight down to the 6.

You just say the hour the hour hand just passed and the number **30**. On this clock, it is **3:30**.

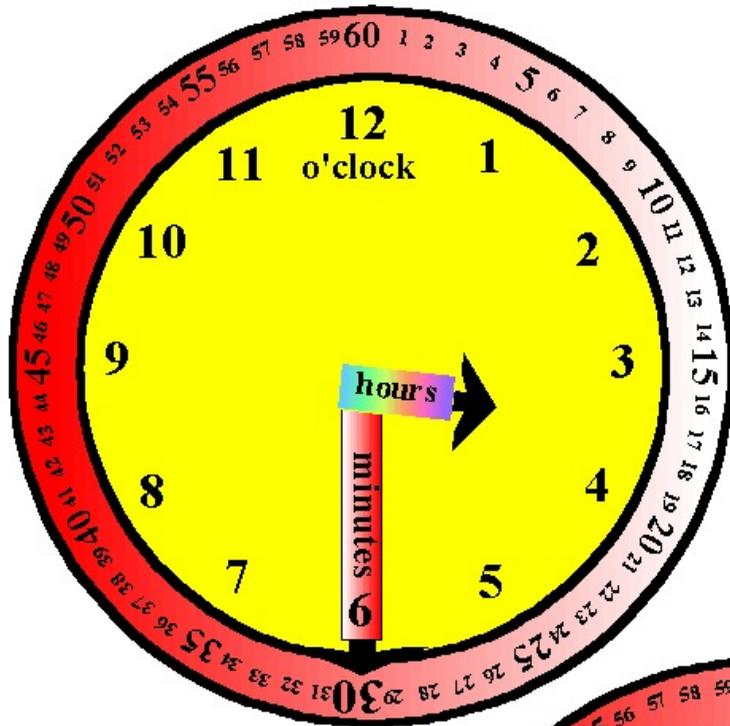




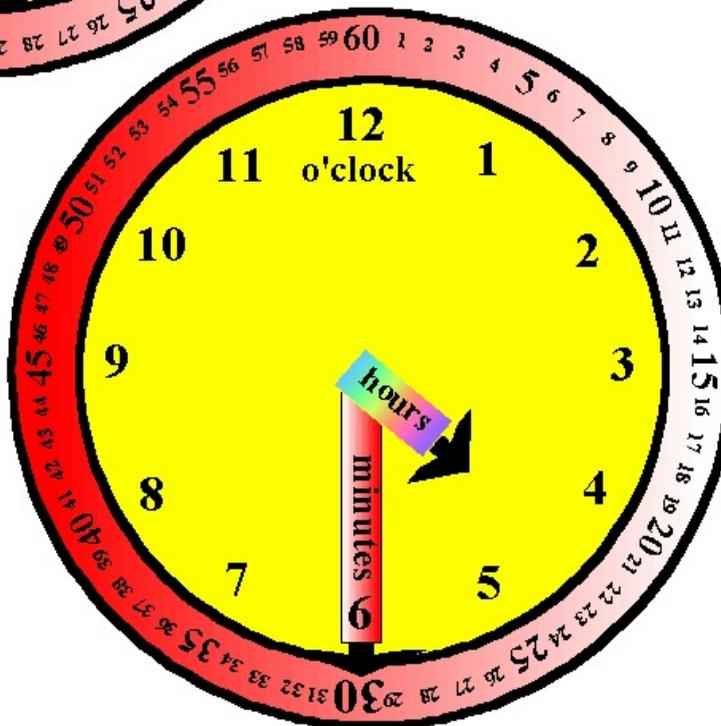
**1:30**



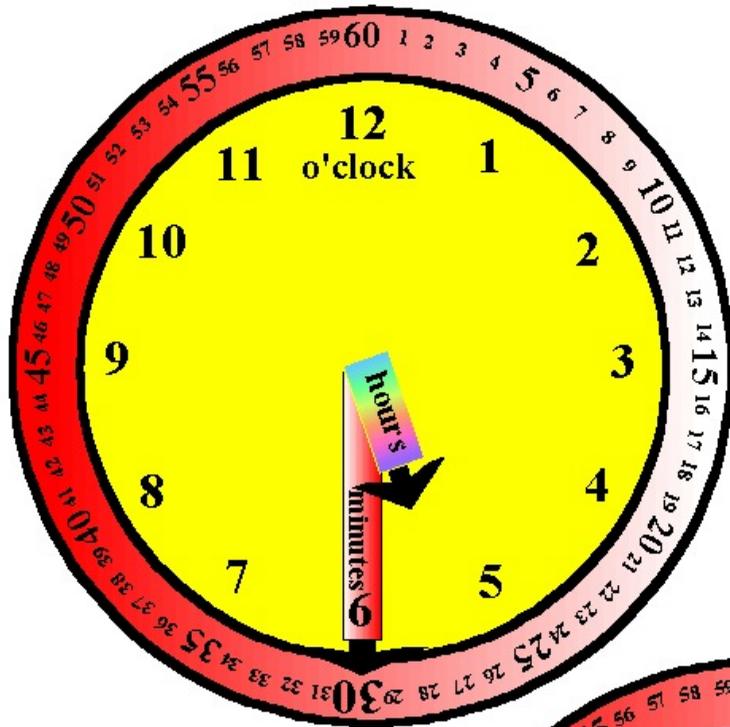
**2:30**



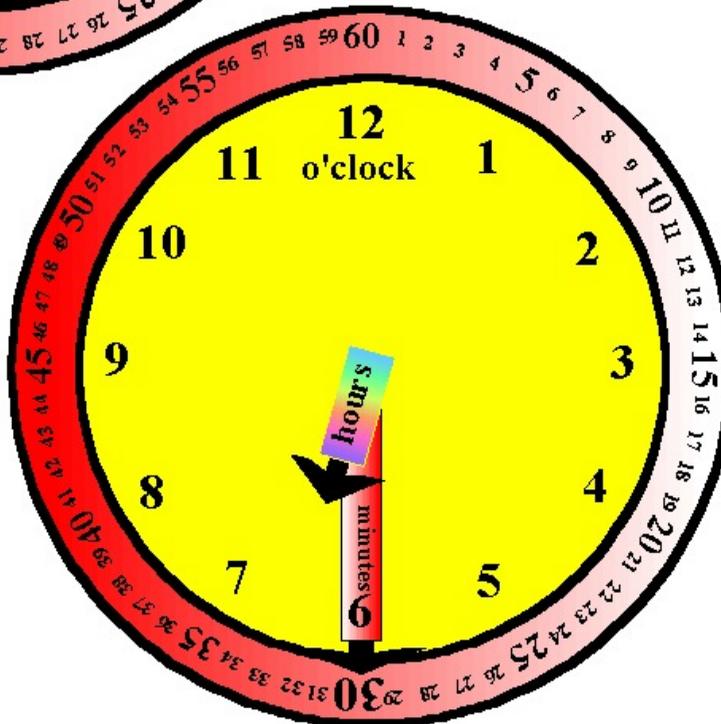
**3:30**



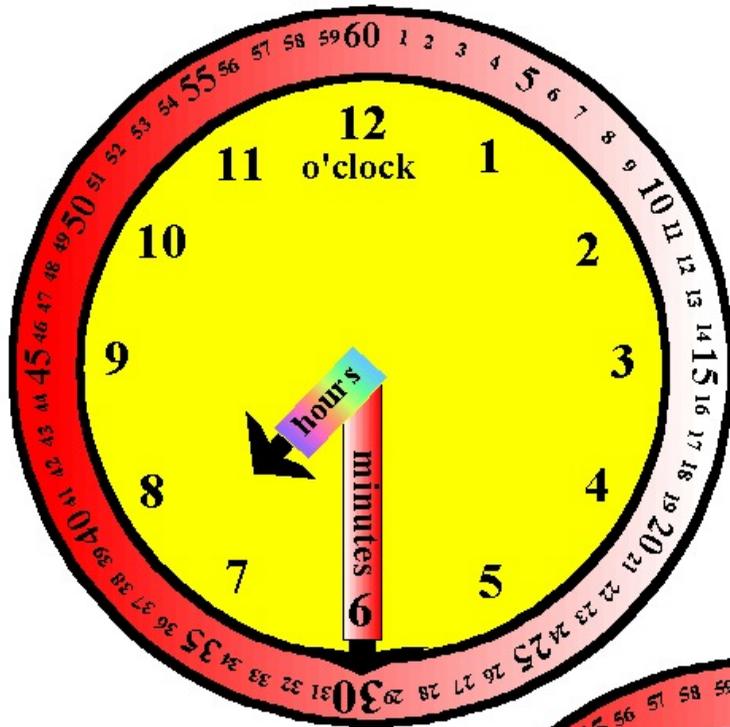
**4:30**



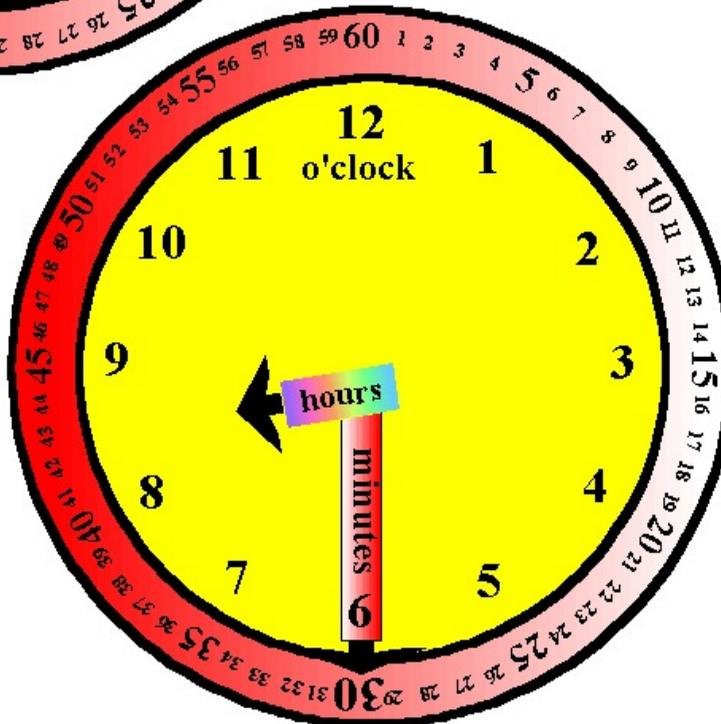
**5:30**



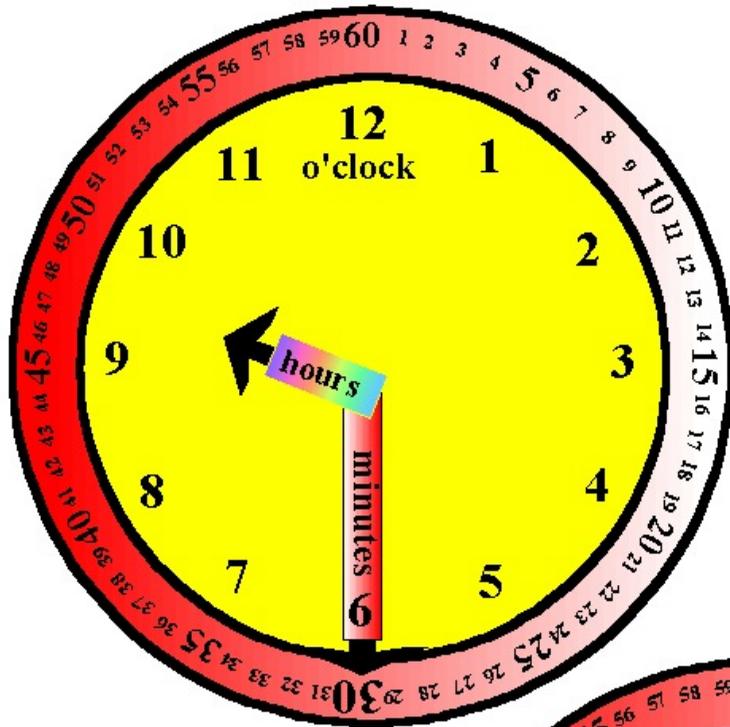
**6:30**



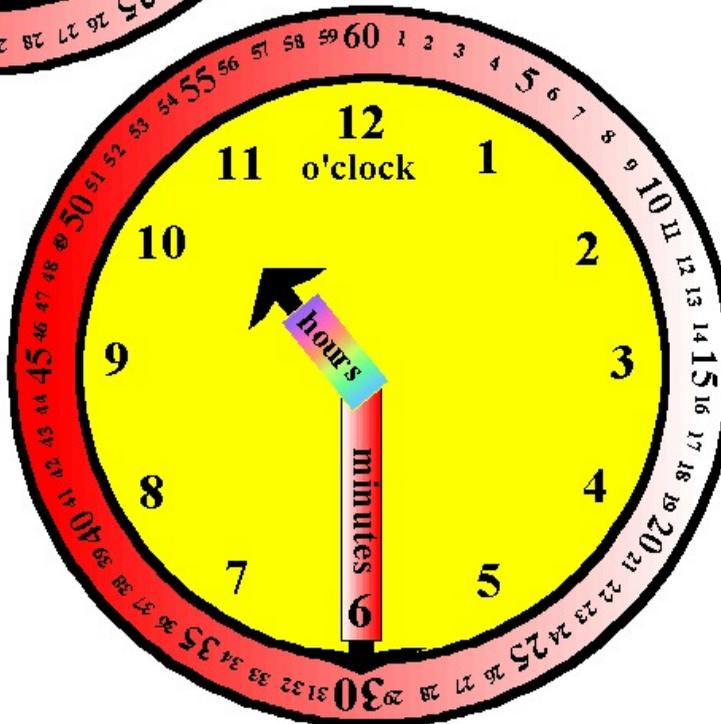
**7:30**



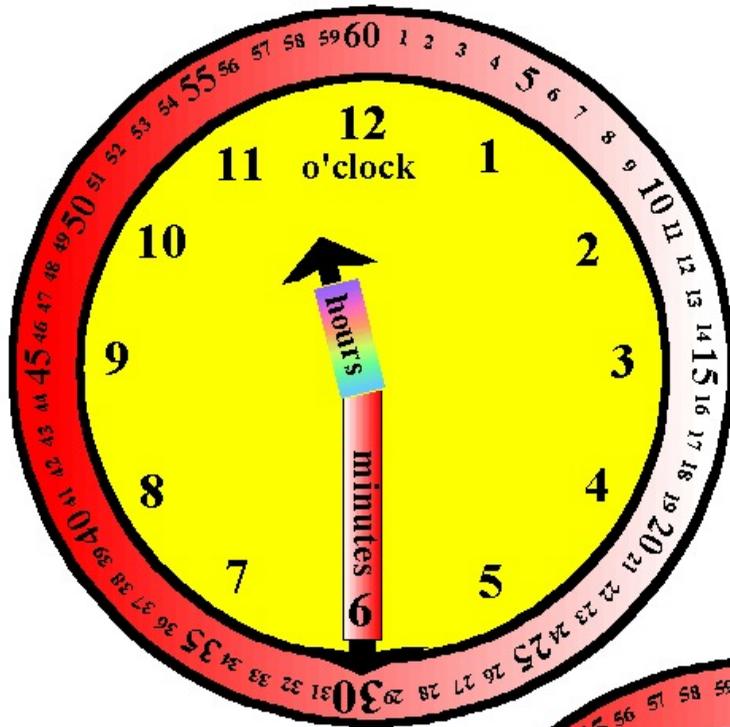
**8:30**



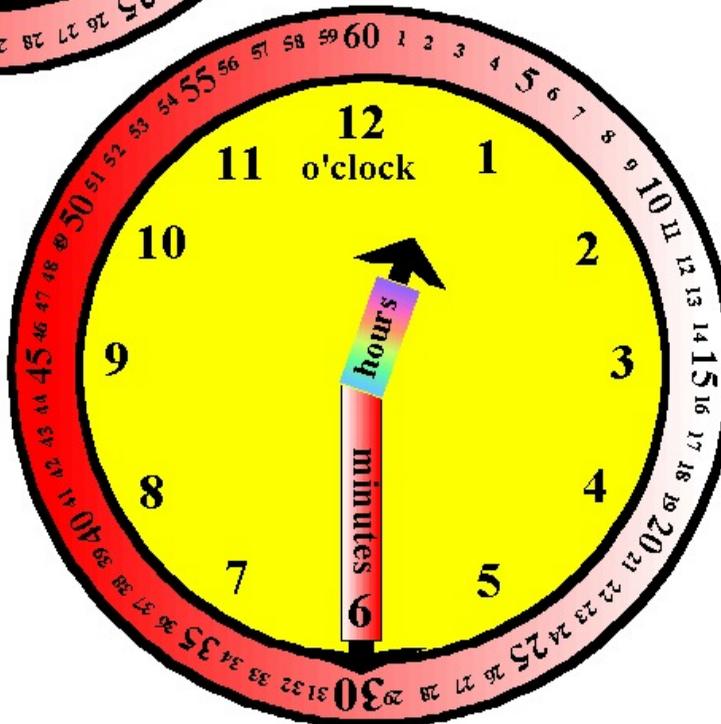
9:30



10:30

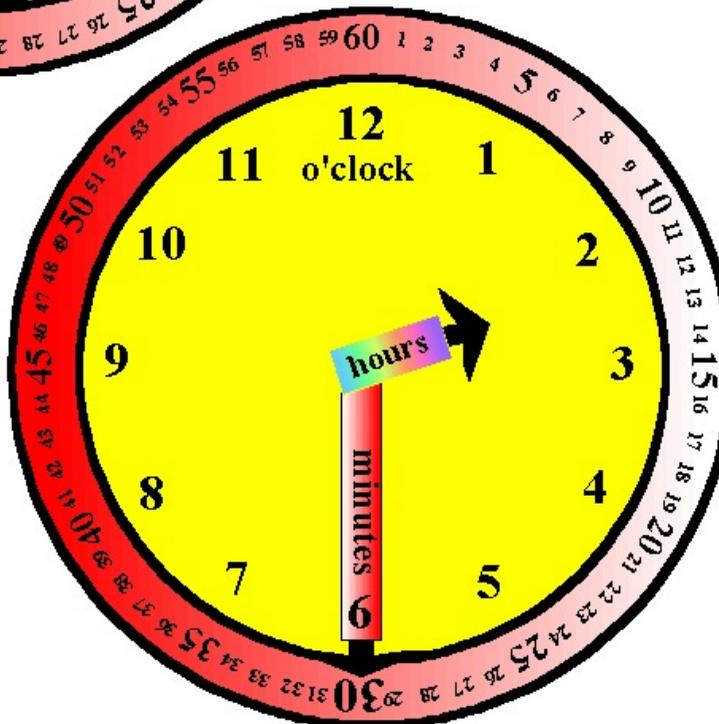
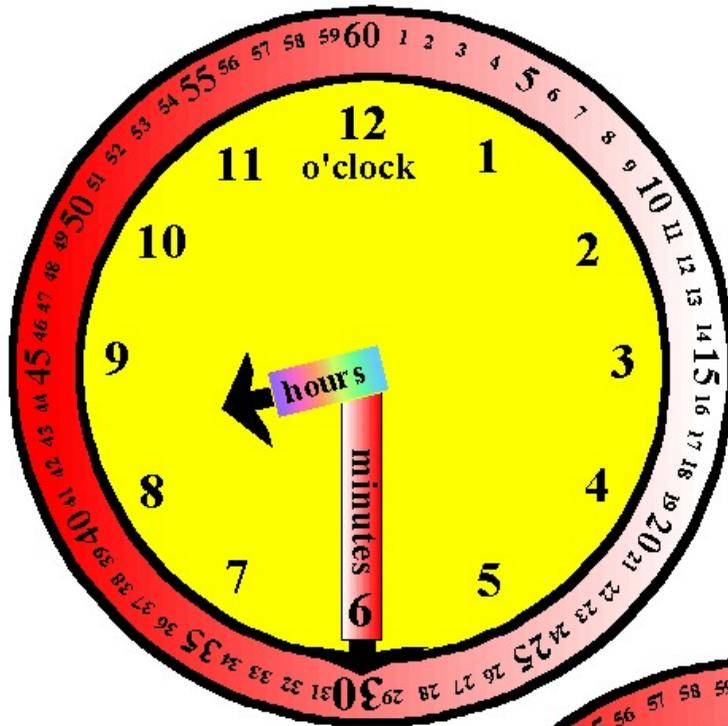


**11:30**

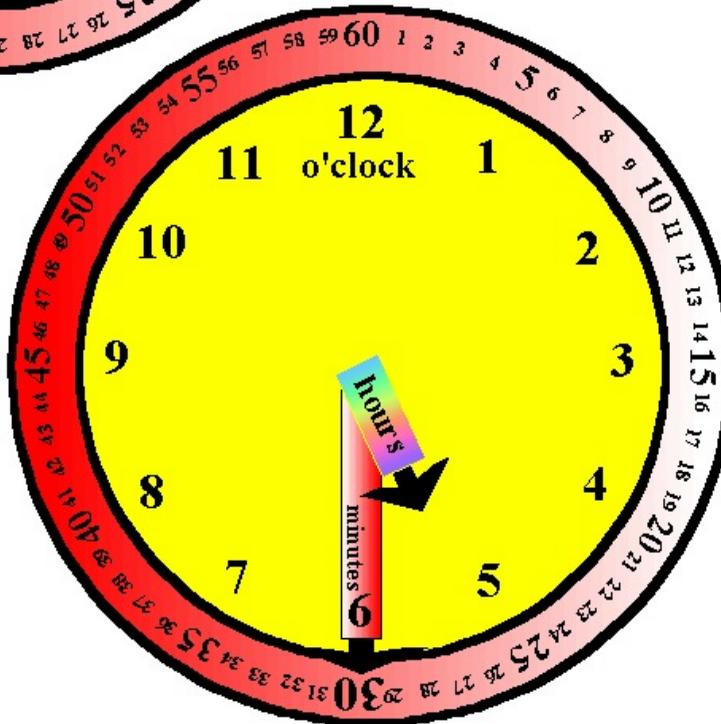
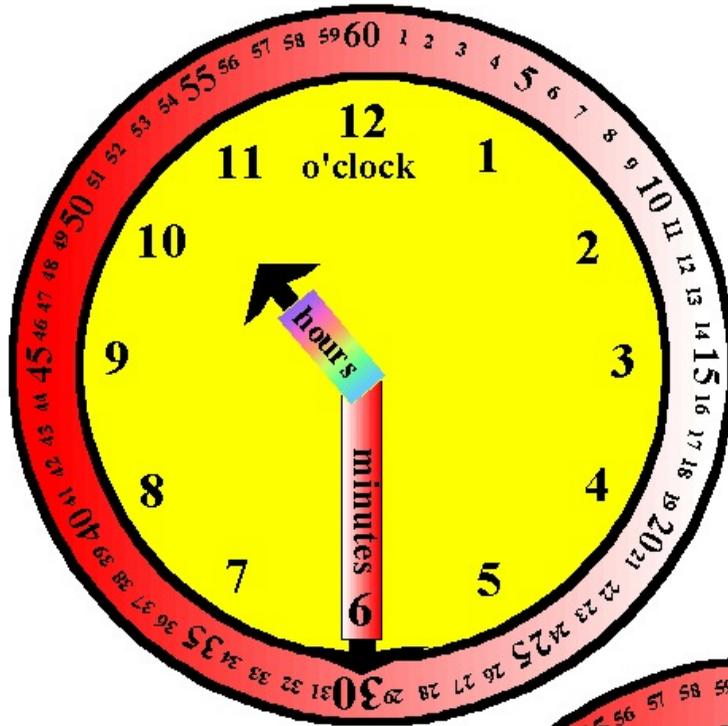


**12:30**

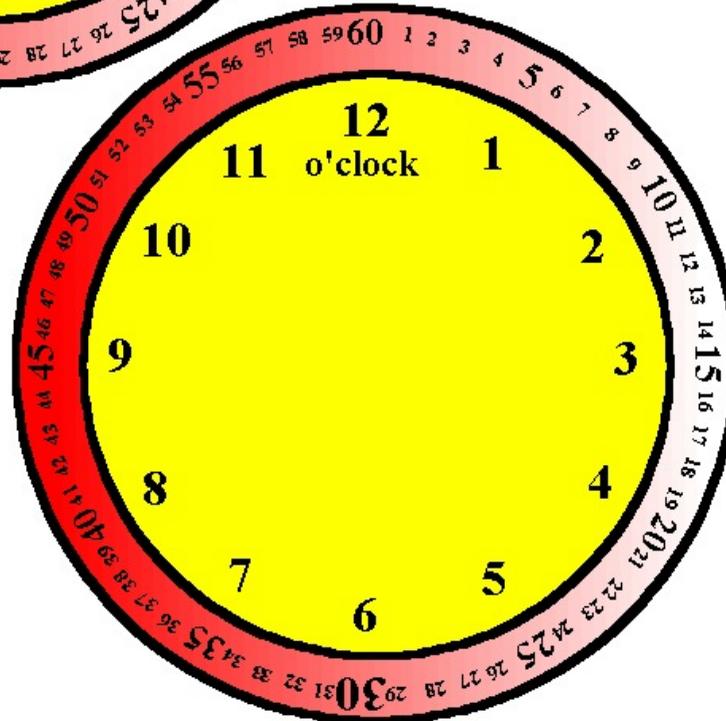
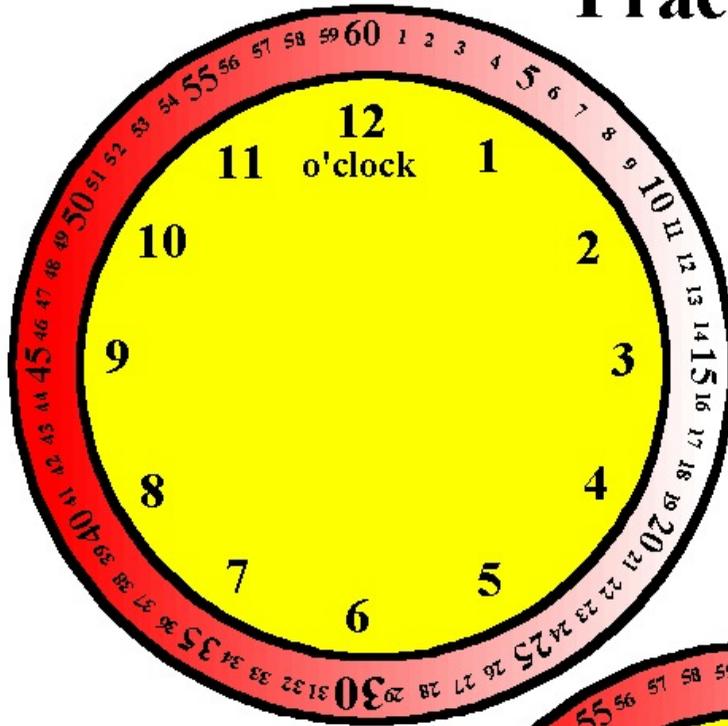
# What Time Is It?

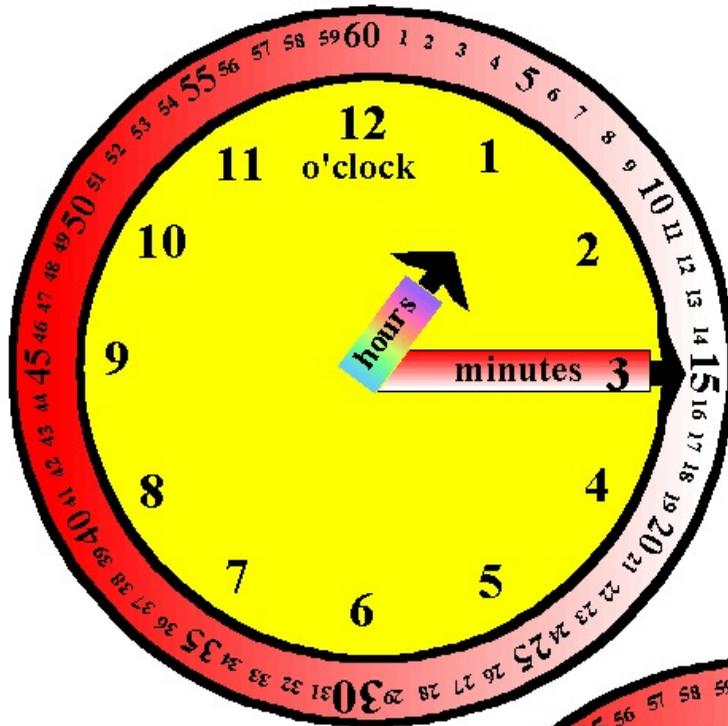


# What Time Is It?



# Practice Clocks...

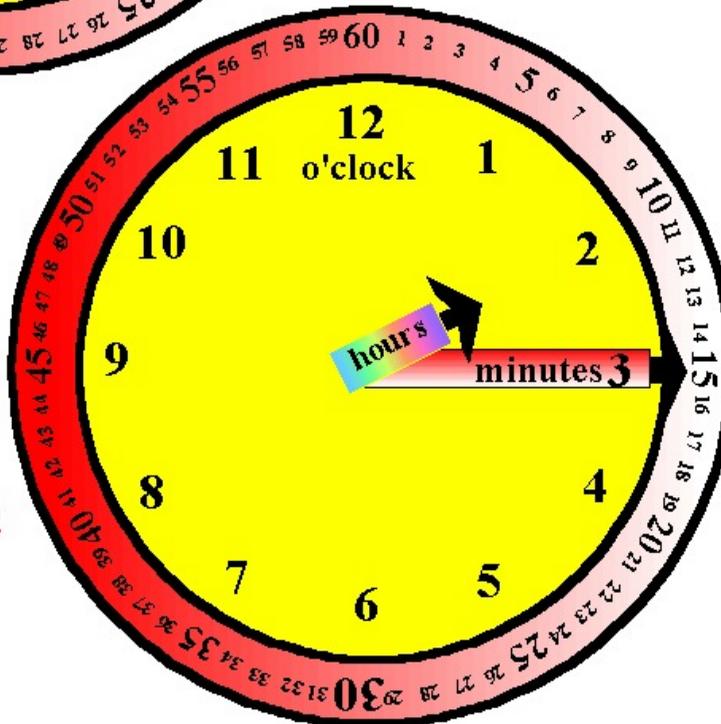




**1:15**

**= 15 After 1**

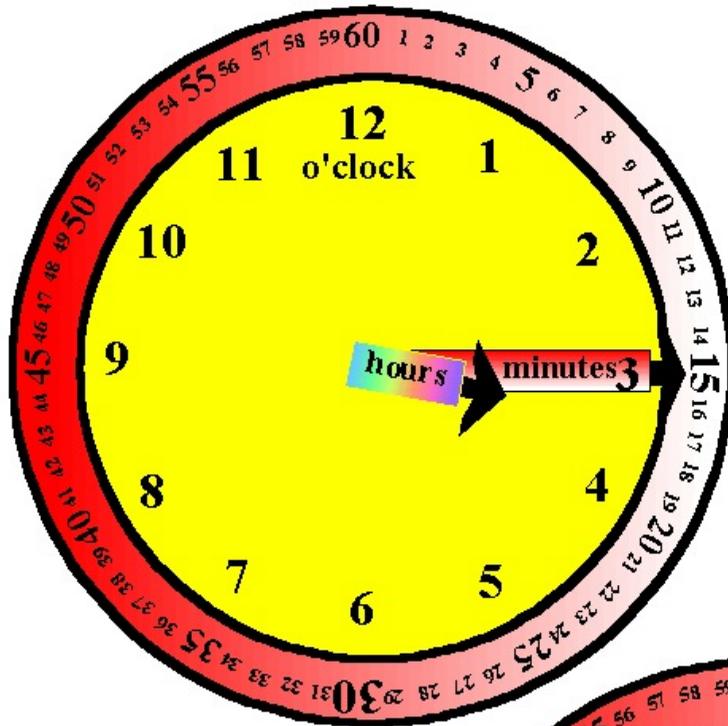
**= Quarter After 1**



**2:15**

**= 15 After 2**

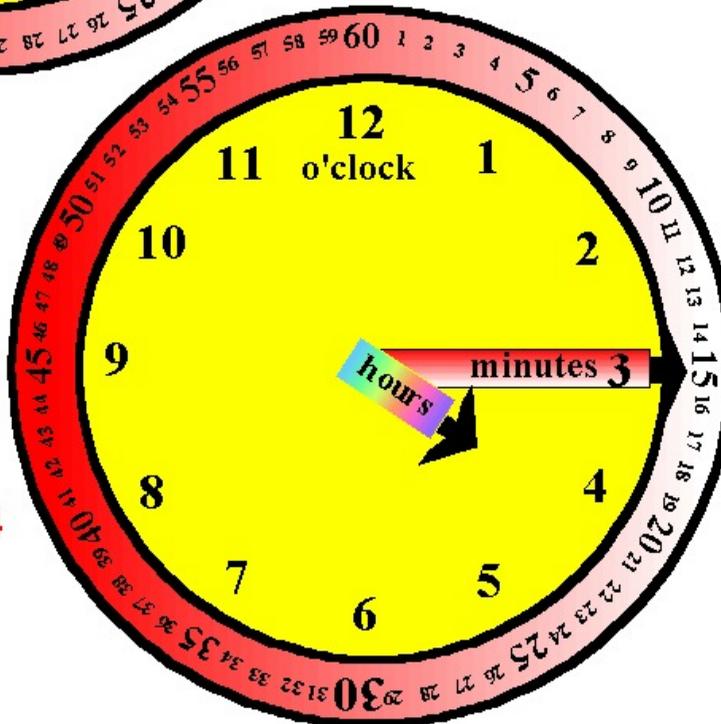
**= Quarter After 2**



**3:15**

**= 15 After 3**

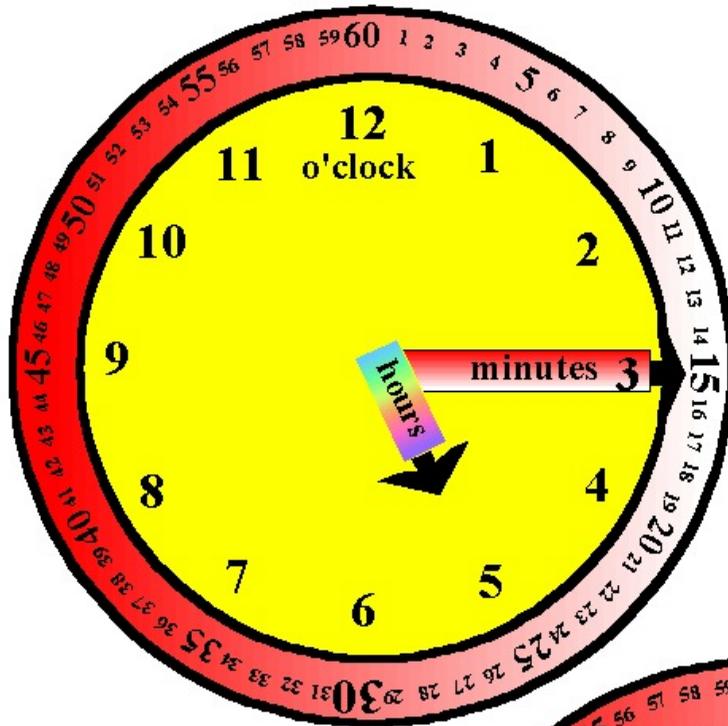
**= Quarter After 3**



**4:15**

**= 15 After 4**

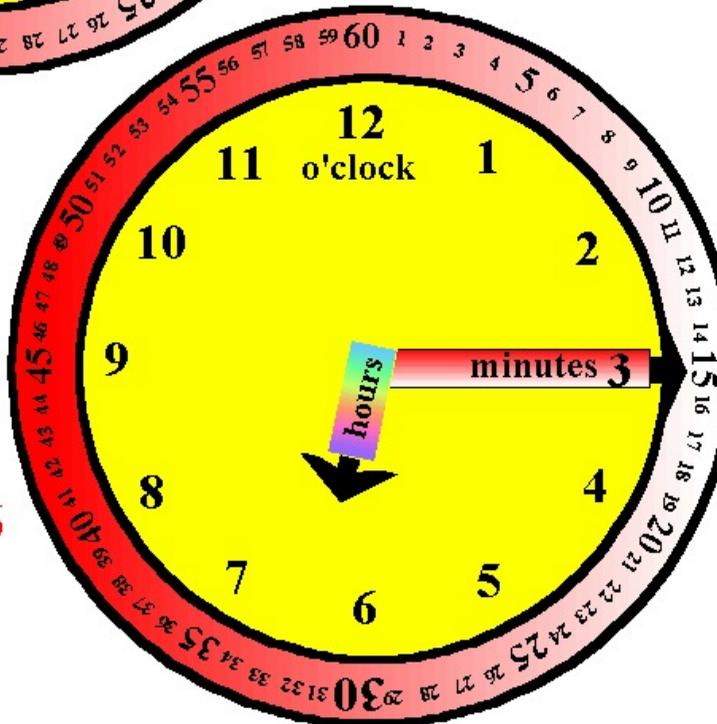
**= Quarter After 4**



**5:15**

**= 15 After 5**

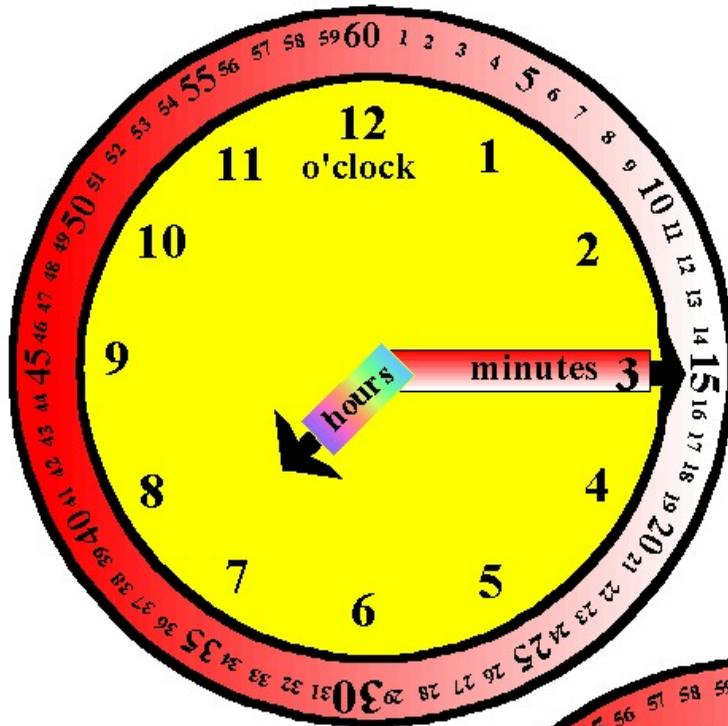
**= Quarter After 5**



**6:15**

**= 15 After 6**

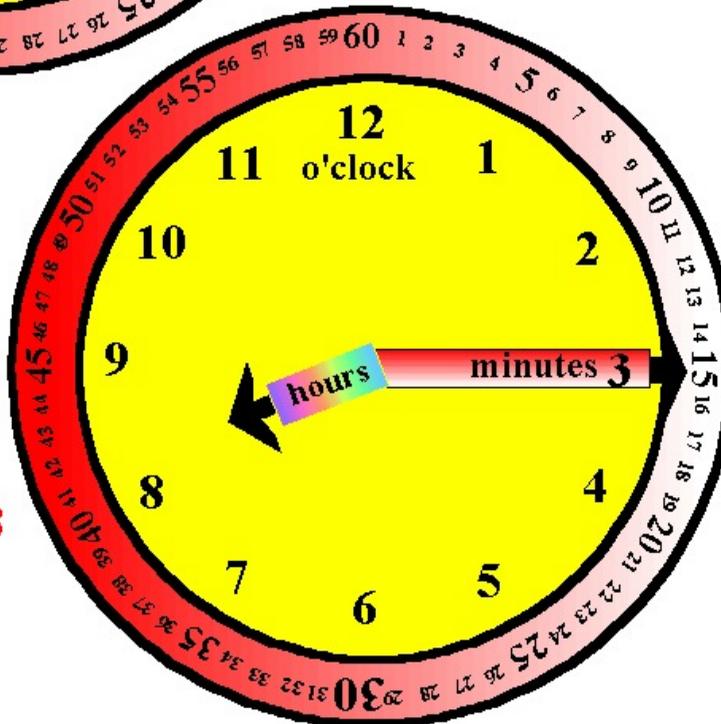
**= Quarter After 6**



**7:15**

**= 15 After 7**

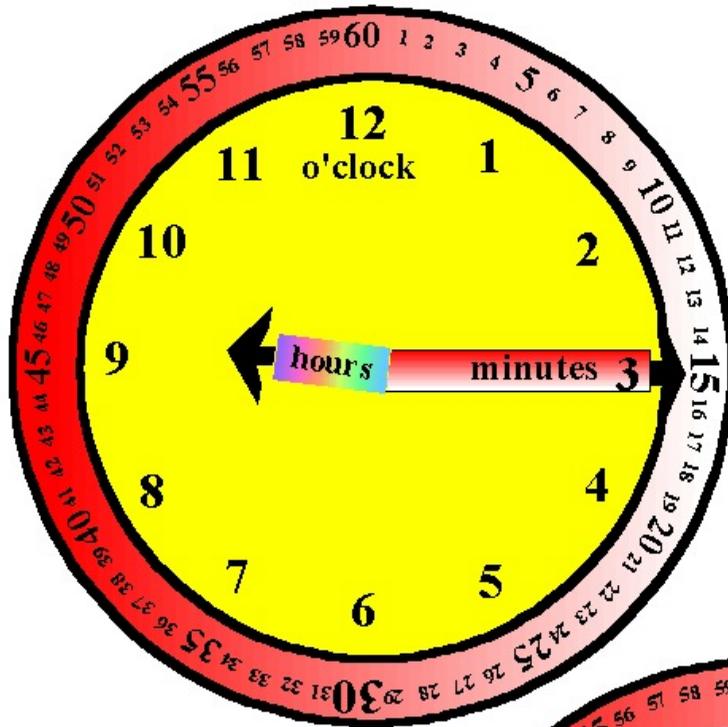
**= Quarter After 7**



**8:15**

**= 15 After 8**

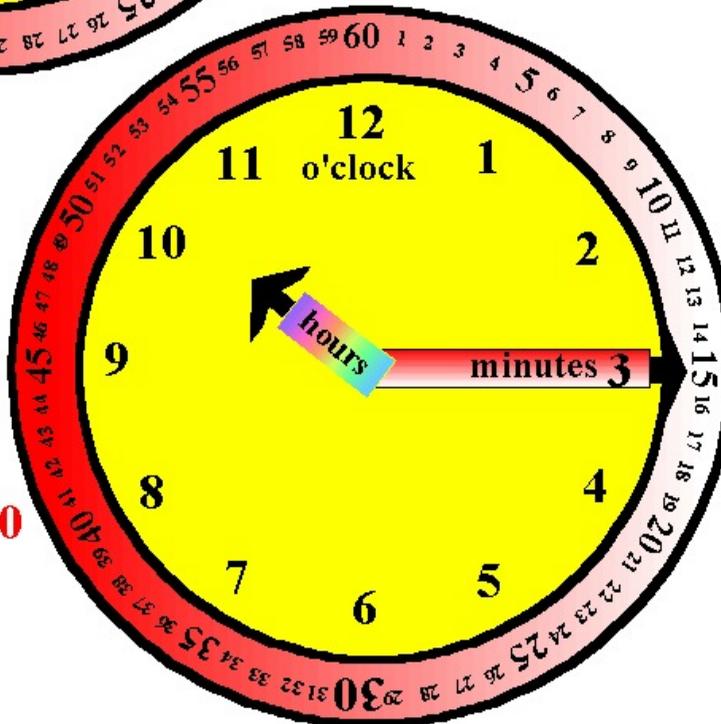
**= Quarter After 8**



**9:15**

**= 15 After 9**

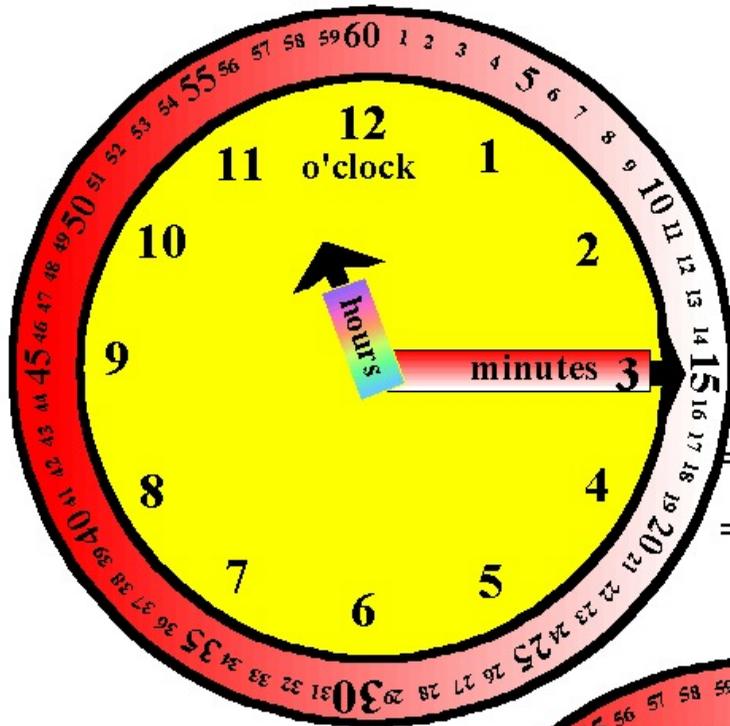
**= Quarter After 9**



**10:15**

**= 15 After 10**

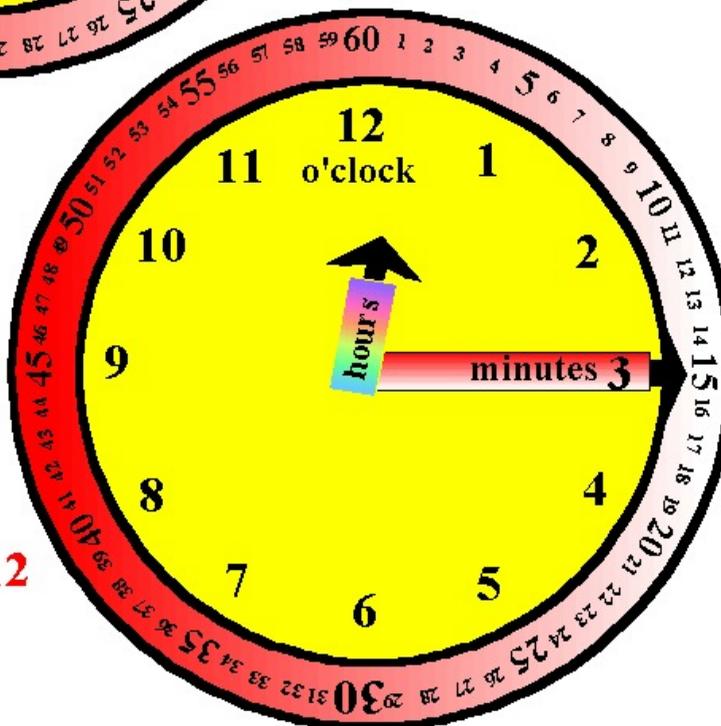
**= Quarter After 10**



**11:15**

**= 15 After 11**

**= Quarter After 11**

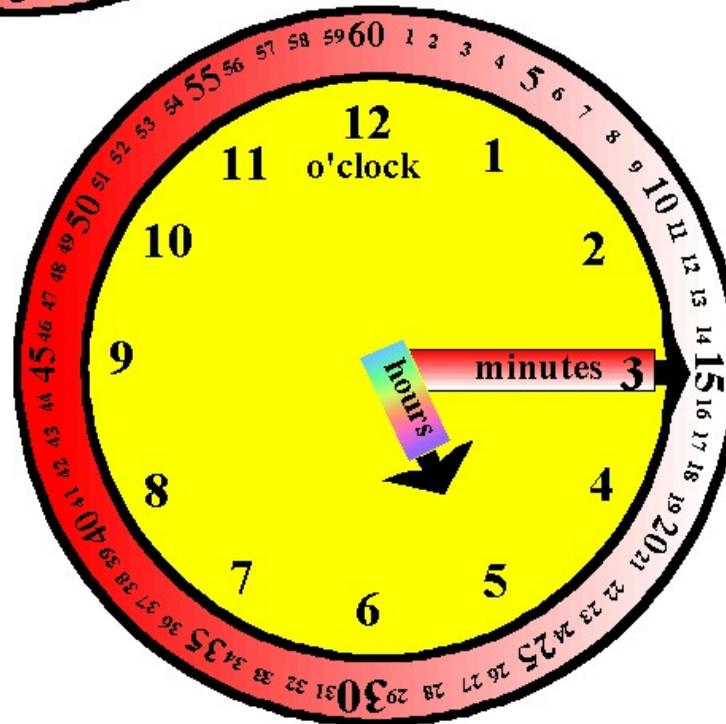
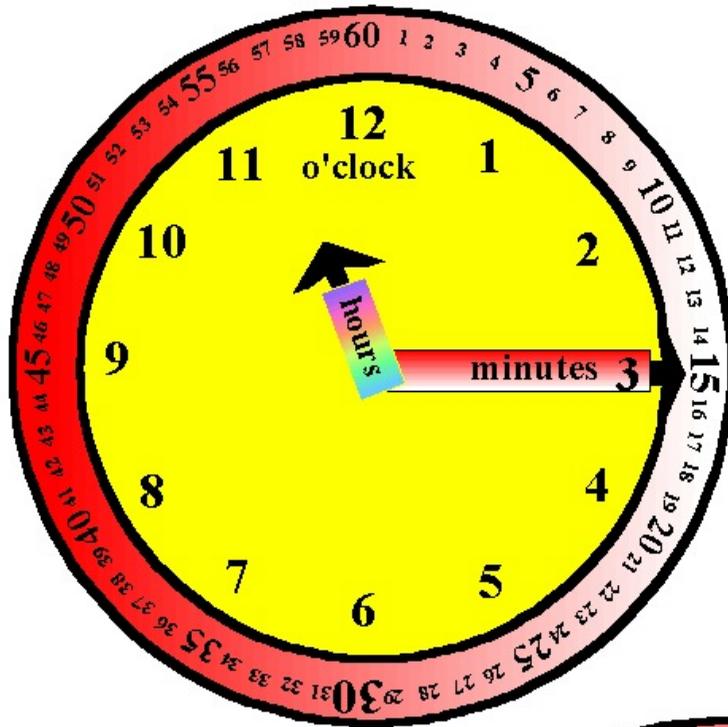


**12:15**

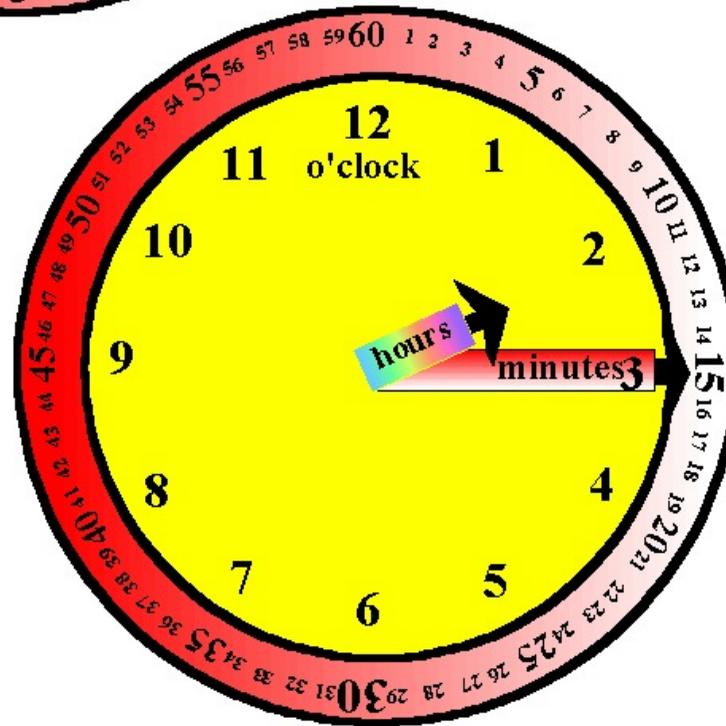
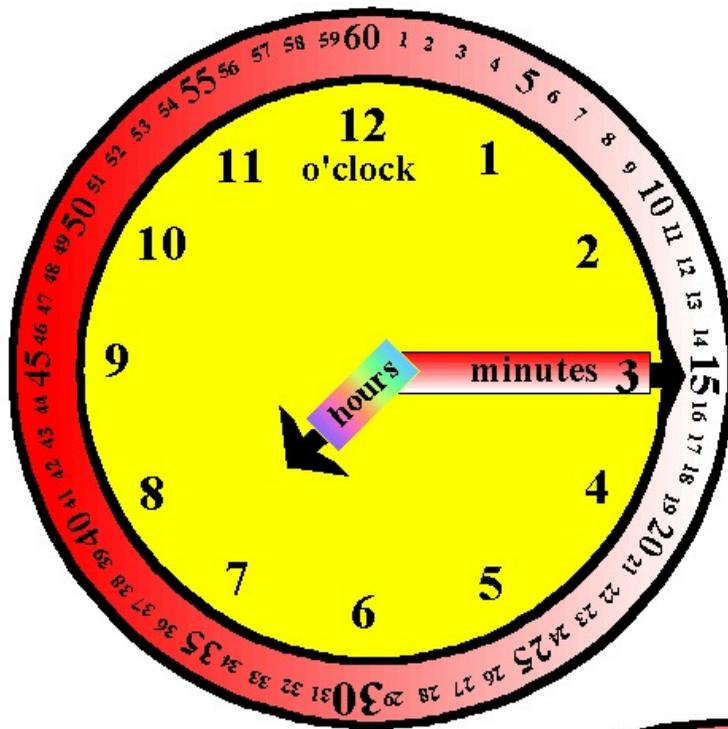
**= 15 After 12**

**= Quarter After 12**

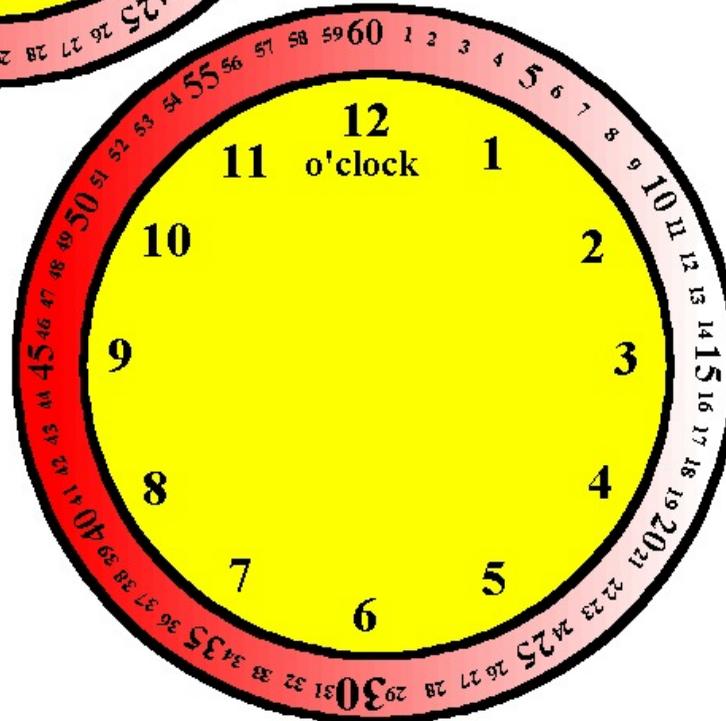
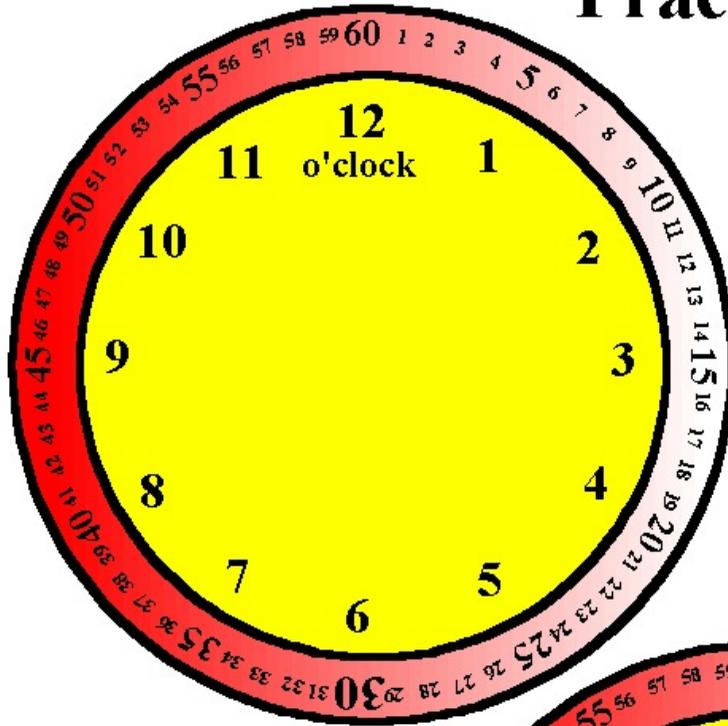
# What Time Is It?



# What Time Is It?



# Practice Clocks...

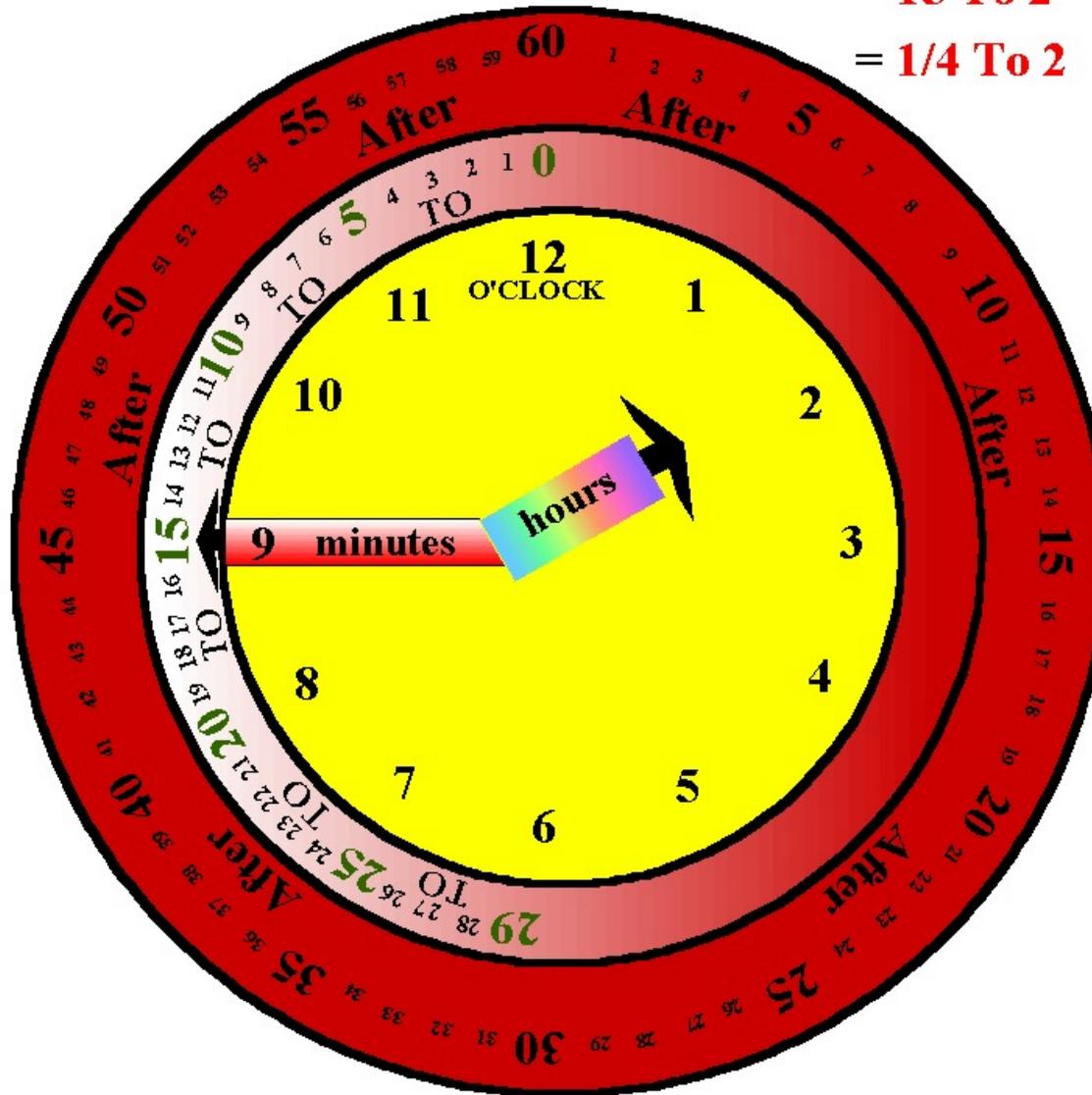


**1:45**

**= 45 After 1**

**= 15 To 2**

**= 1/4 To 2**



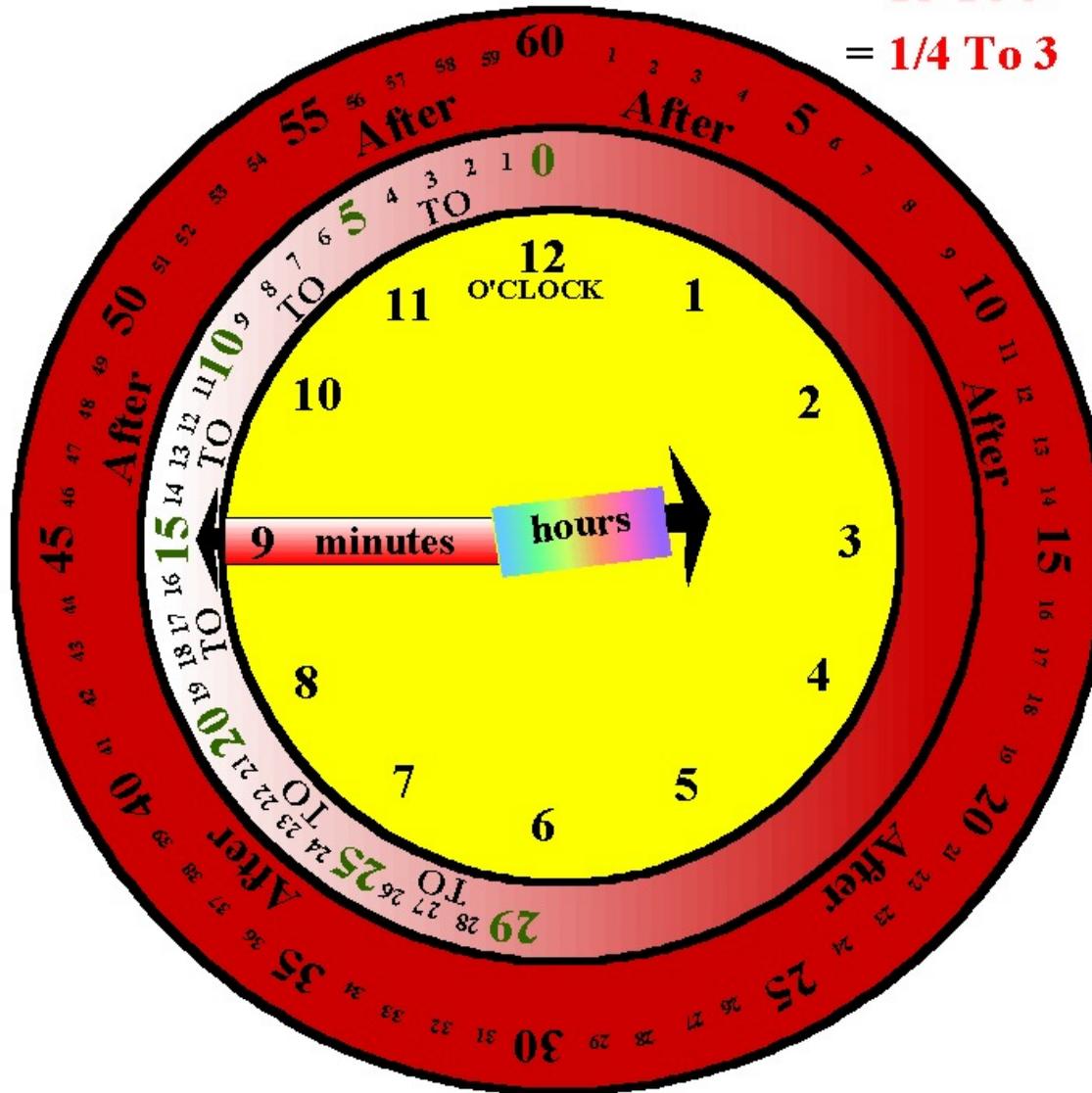
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**2:45**

= **45 After 2**

= **15 To 3**

= **1/4 To 3**



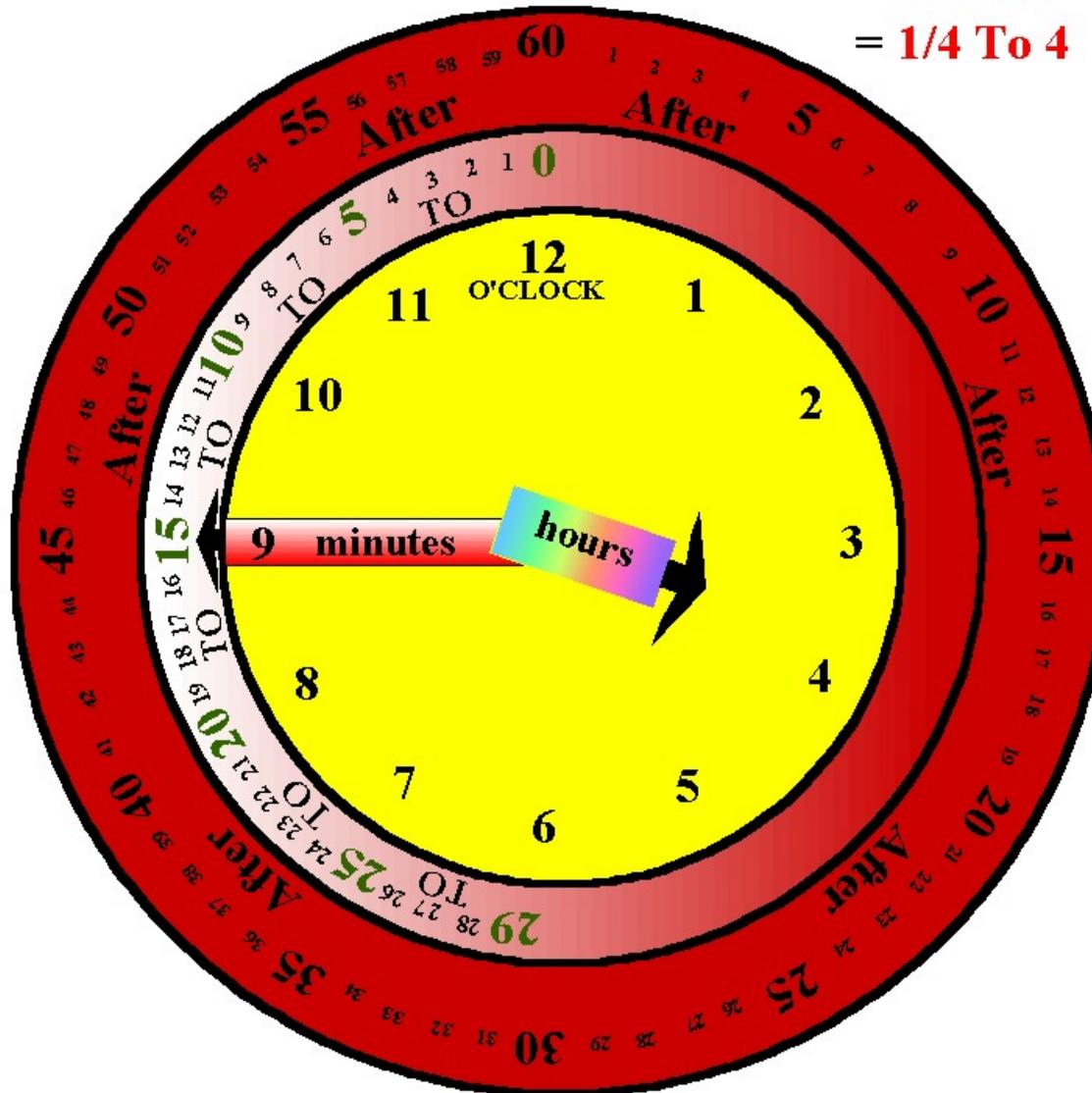
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:45**

**= 45 After 3**

**= 15 To 4**

**= 1/4 To 4**



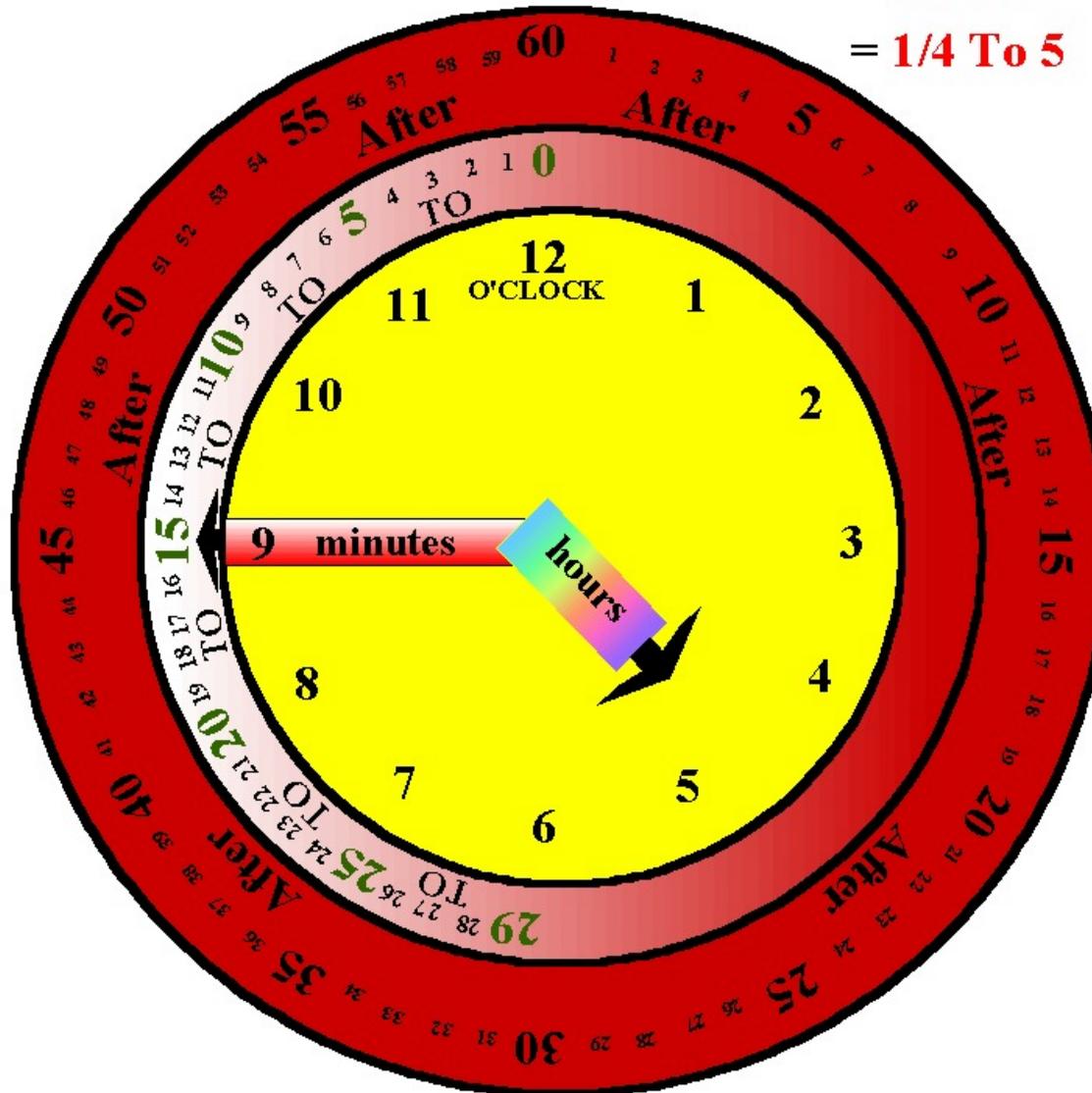
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**4:45**

**= 45 After 4**

**= 15 To 5**

**= 1/4 To 5**



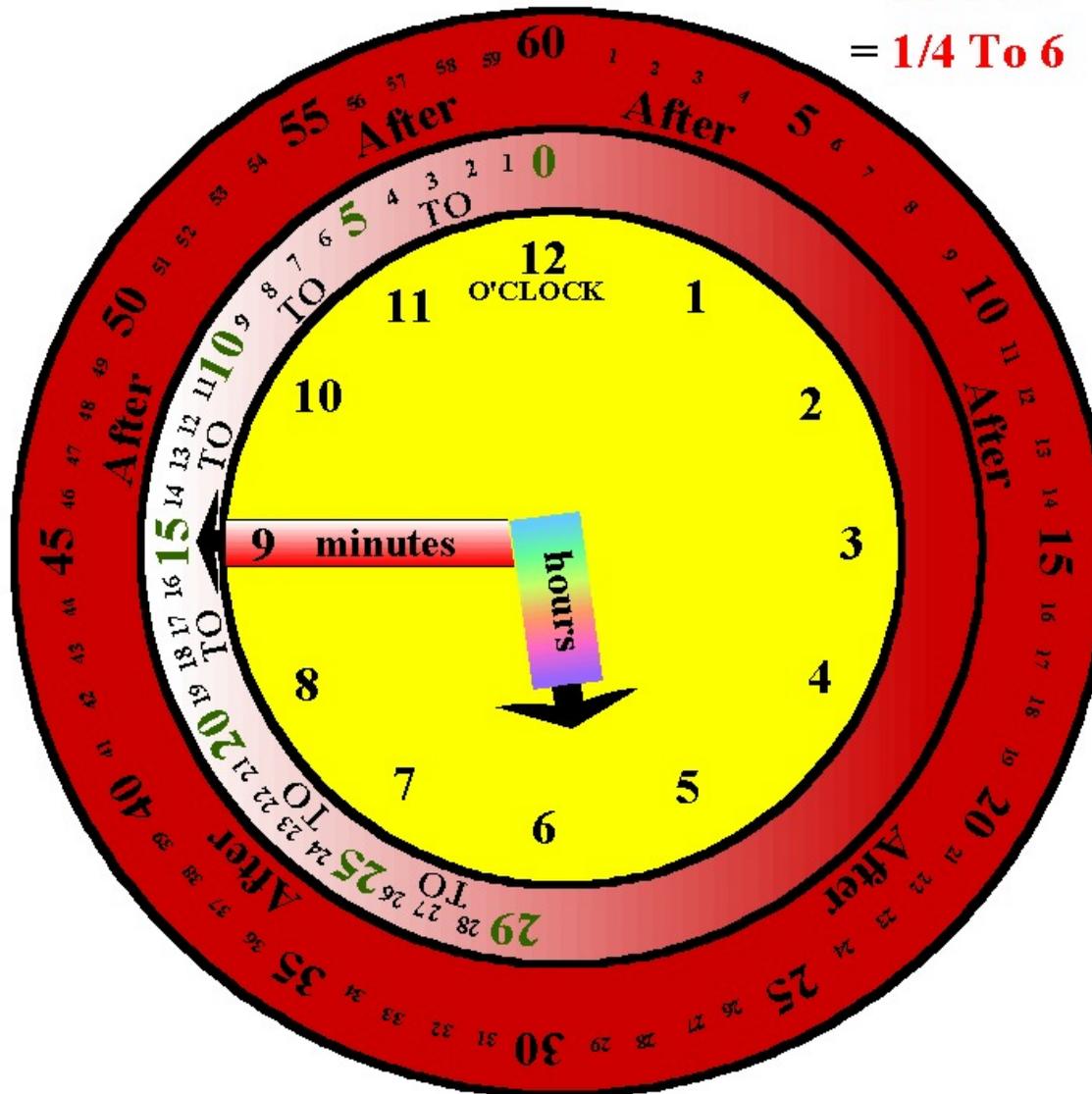
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**5:45**

**= 45 After 5**

**= 15 To 6**

**= 1/4 To 6**



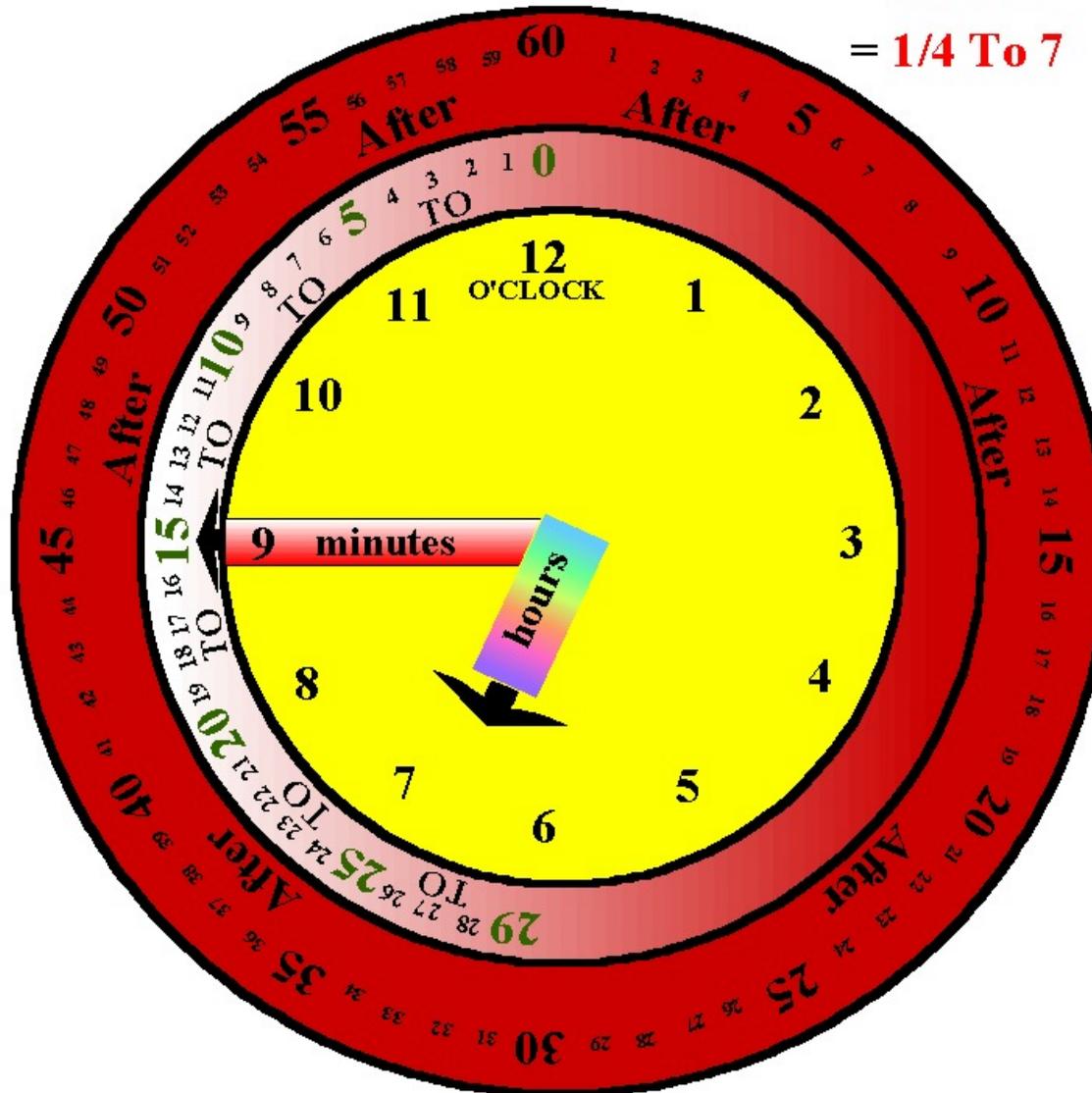
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**6:45**

**= 45 After 6**

**= 15 To 7**

**= 1/4 To 7**



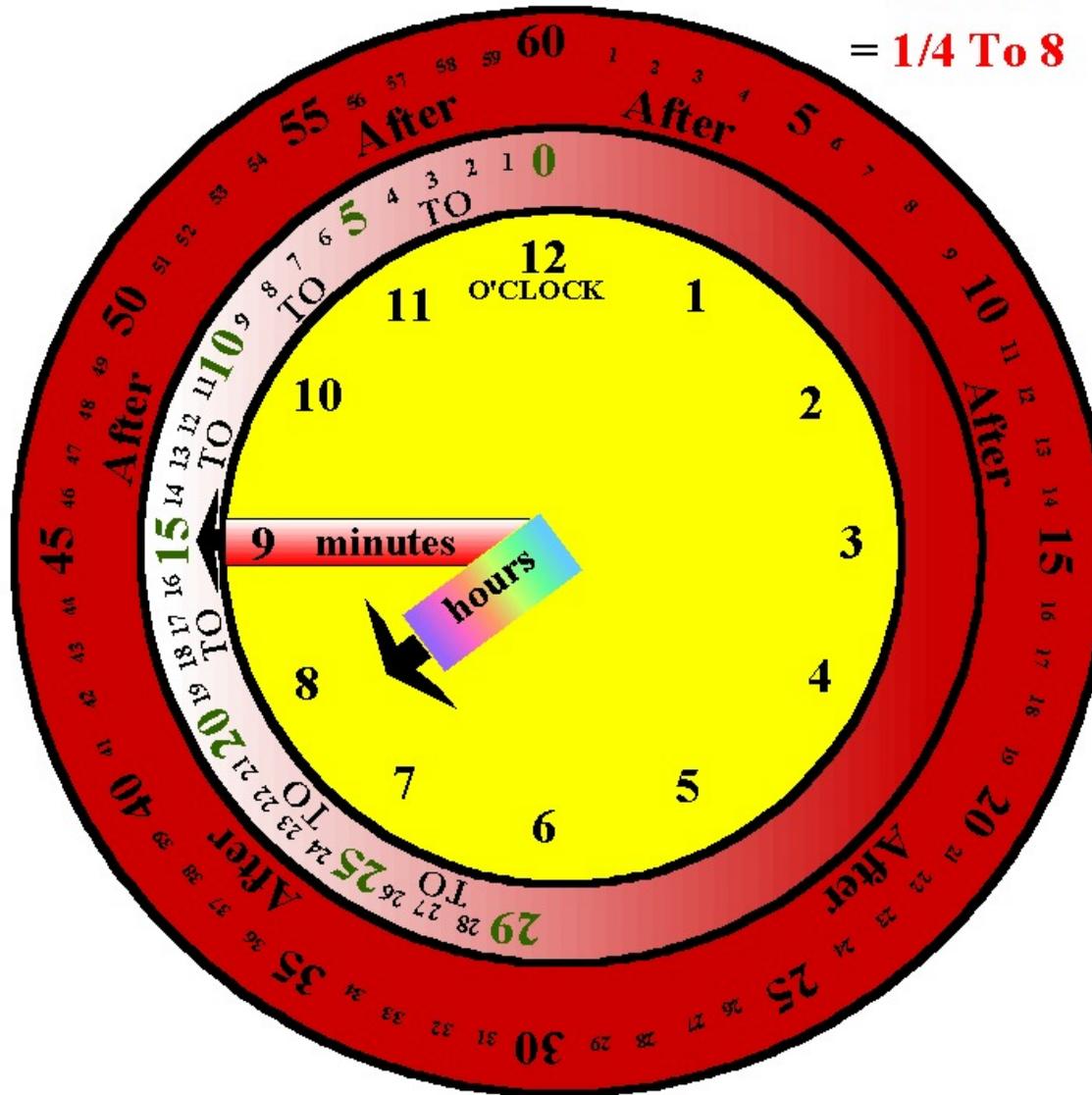
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

7:45

= 45 After 7

= 15 To 8

= 1/4 To 8



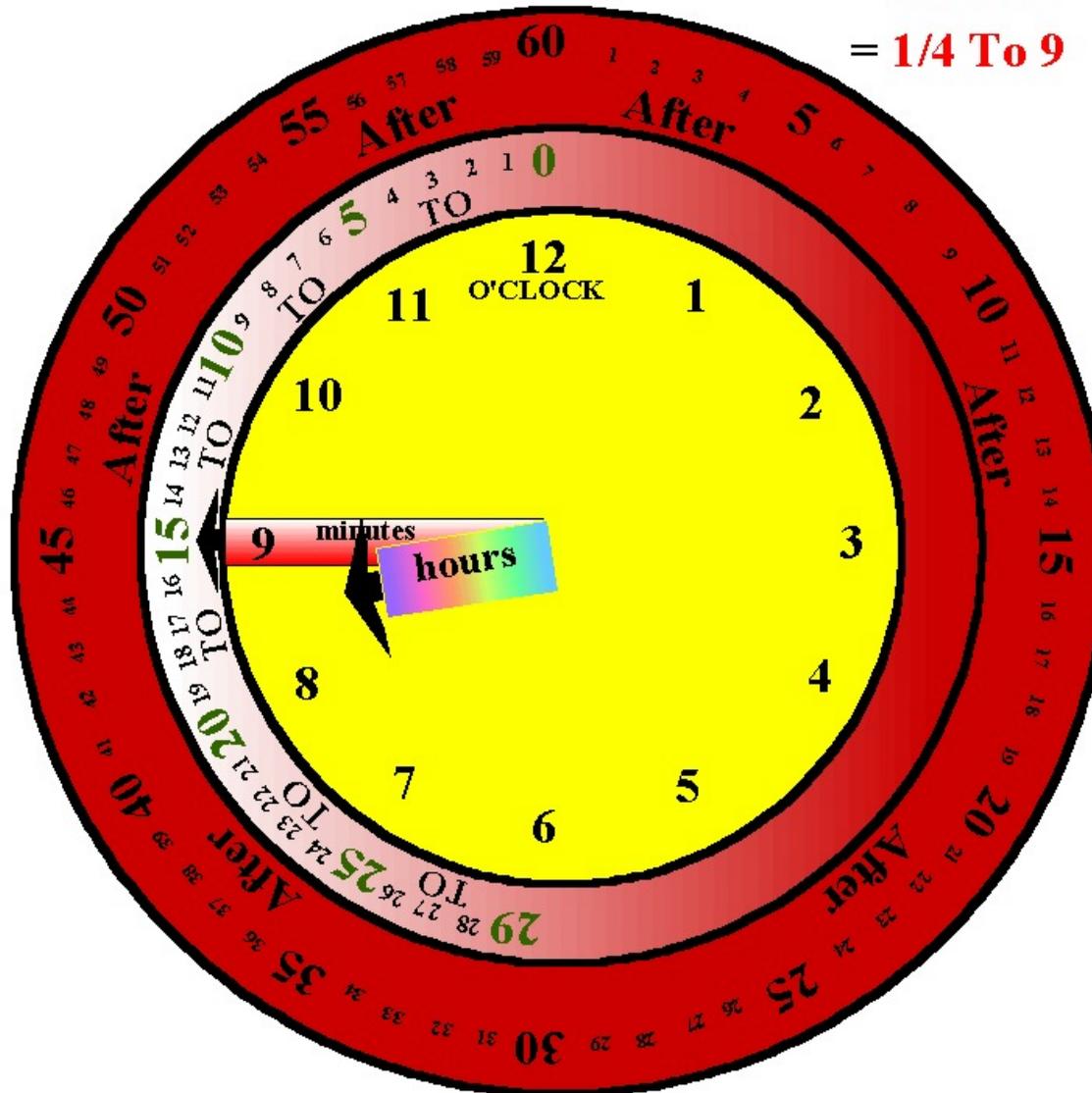
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**8:45**

**= 45 After 8**

**= 15 To 9**

**= 1/4 To 9**



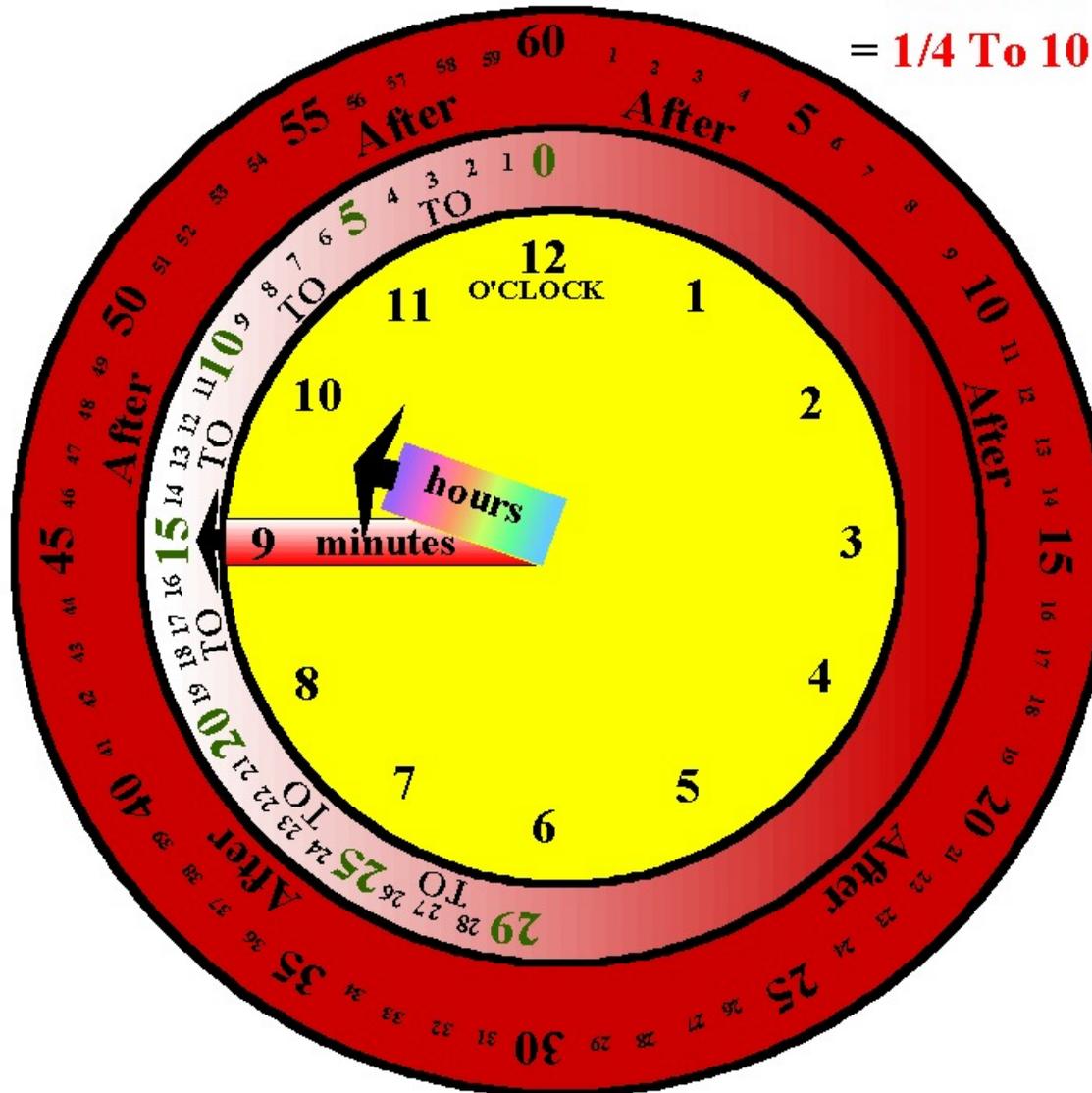
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

9:45

= 45 After 9

= 15 To 10

= 1/4 To 10



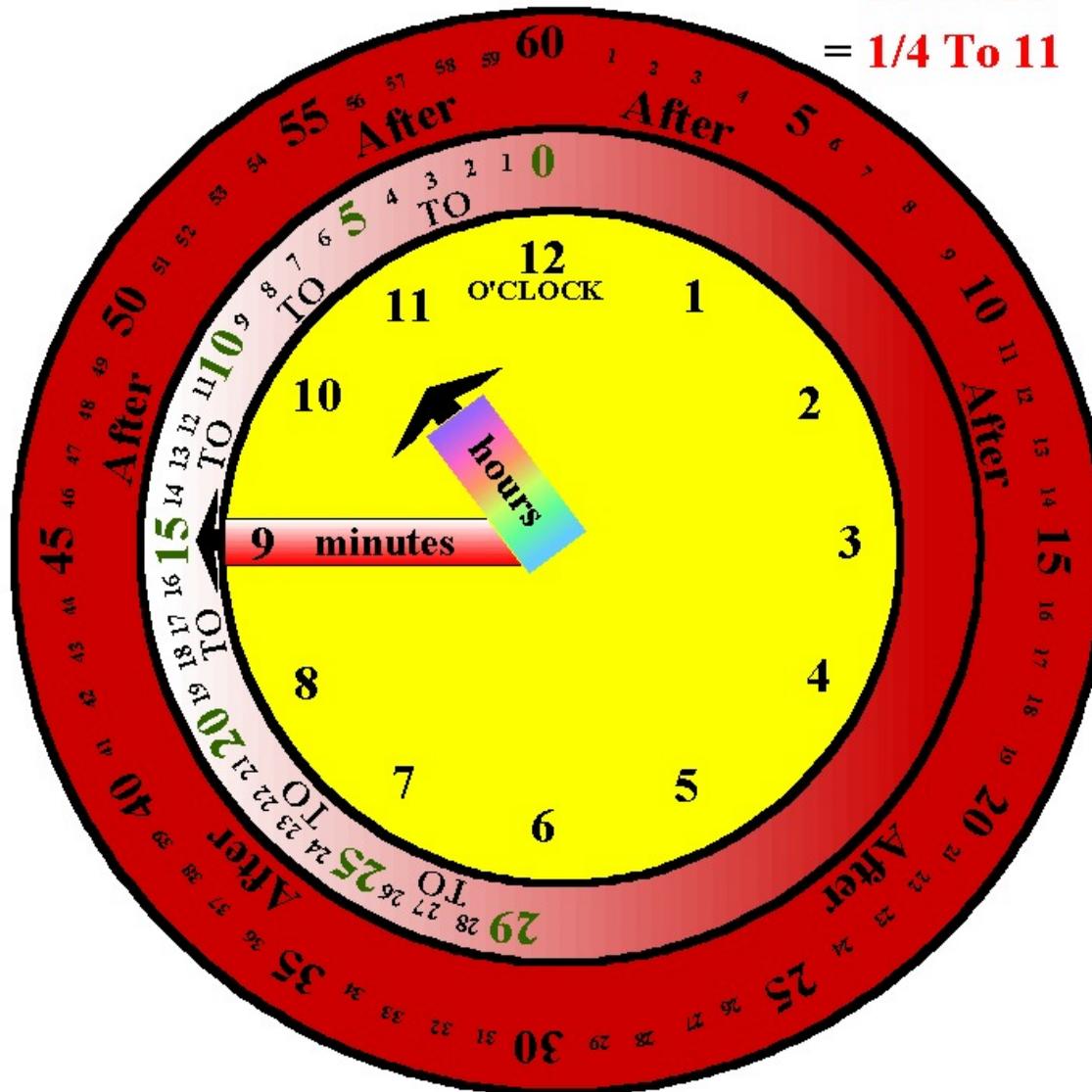
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**10:45**

**= 45 After 10**

**= 15 To 11**

**= 1/4 To 11**



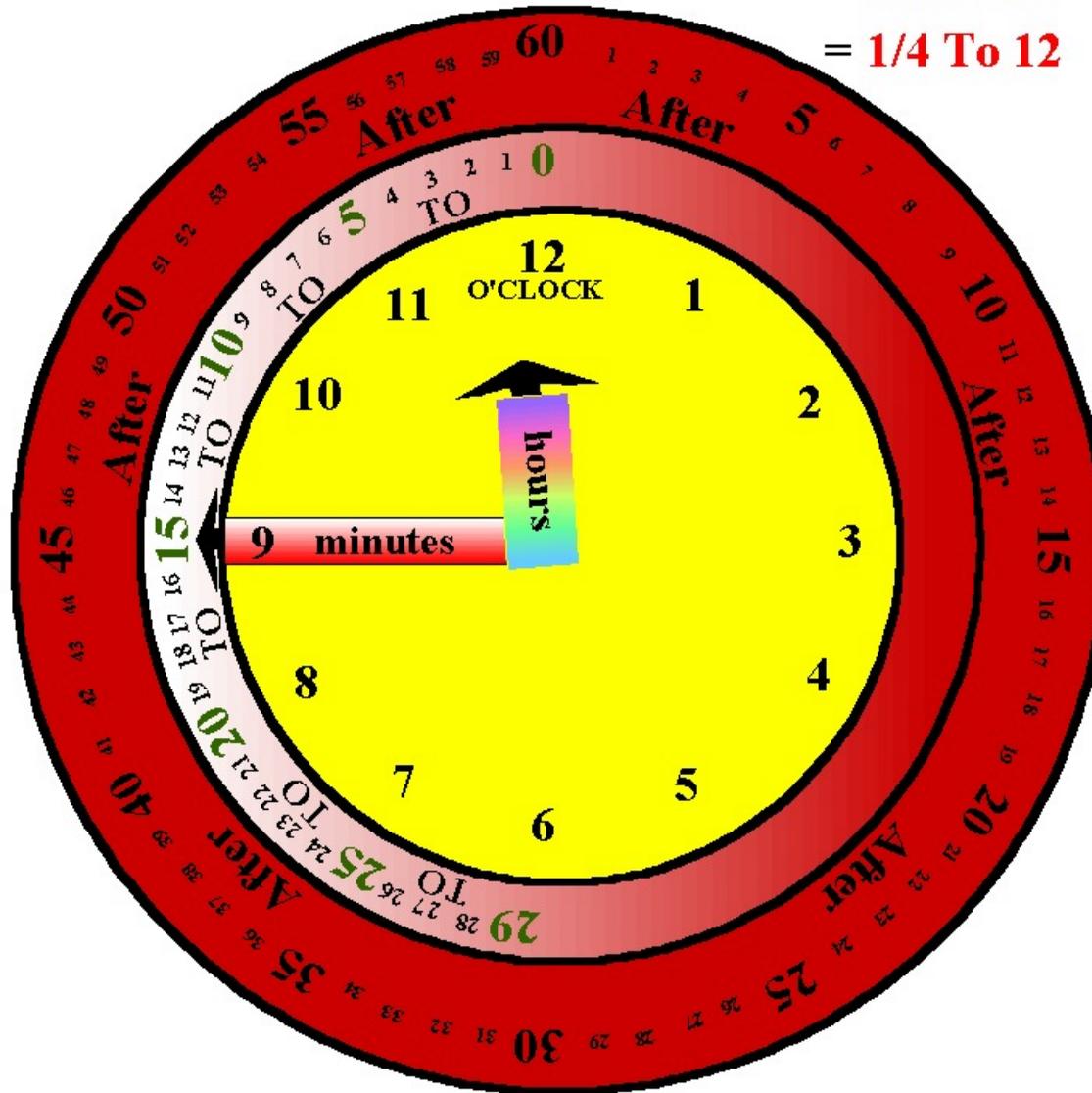
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**11:45**

**= 45 After 11**

**= 15 To 12**

**= 1/4 To 12**



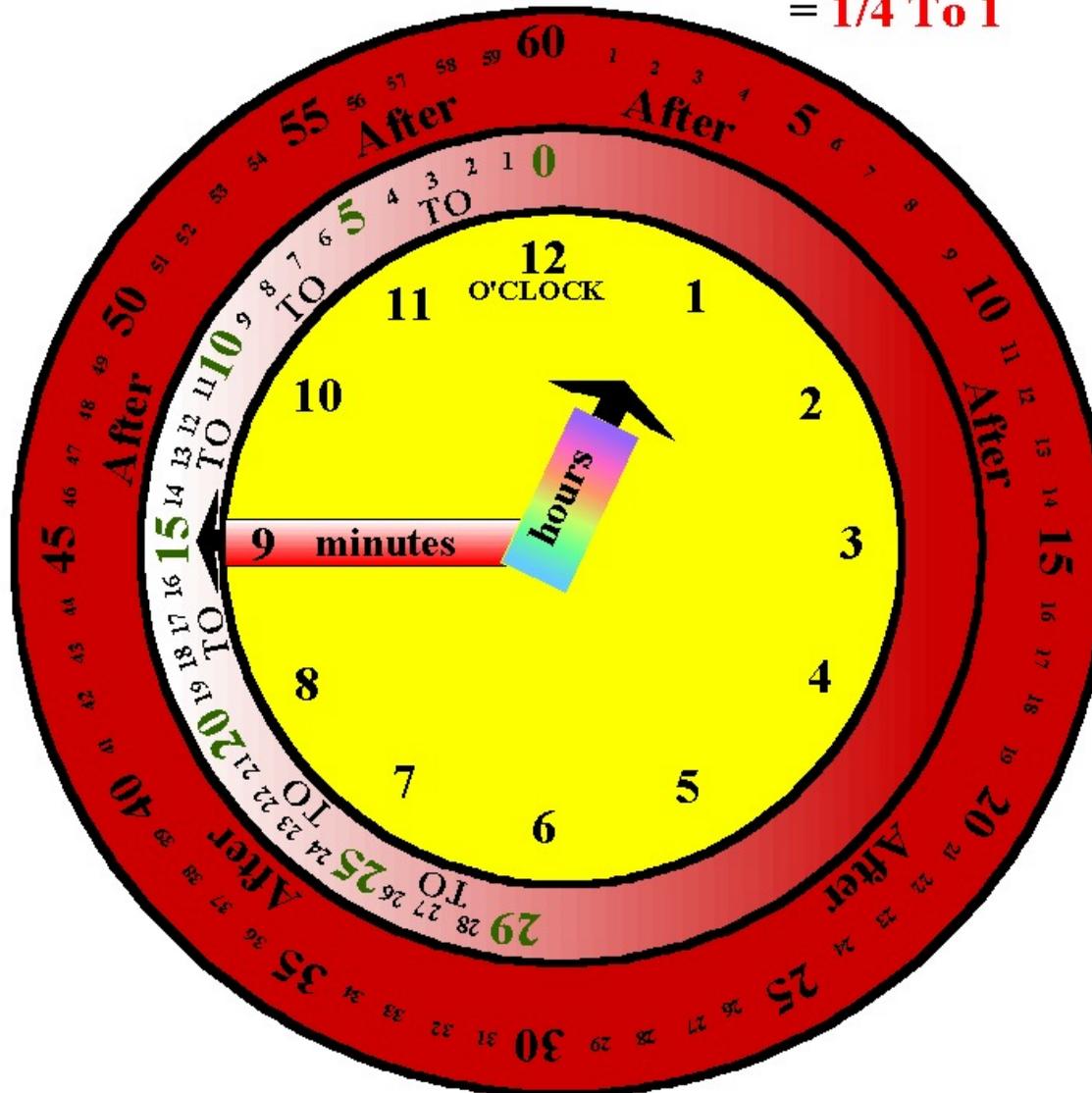
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**12:45**

**= 45 After 12**

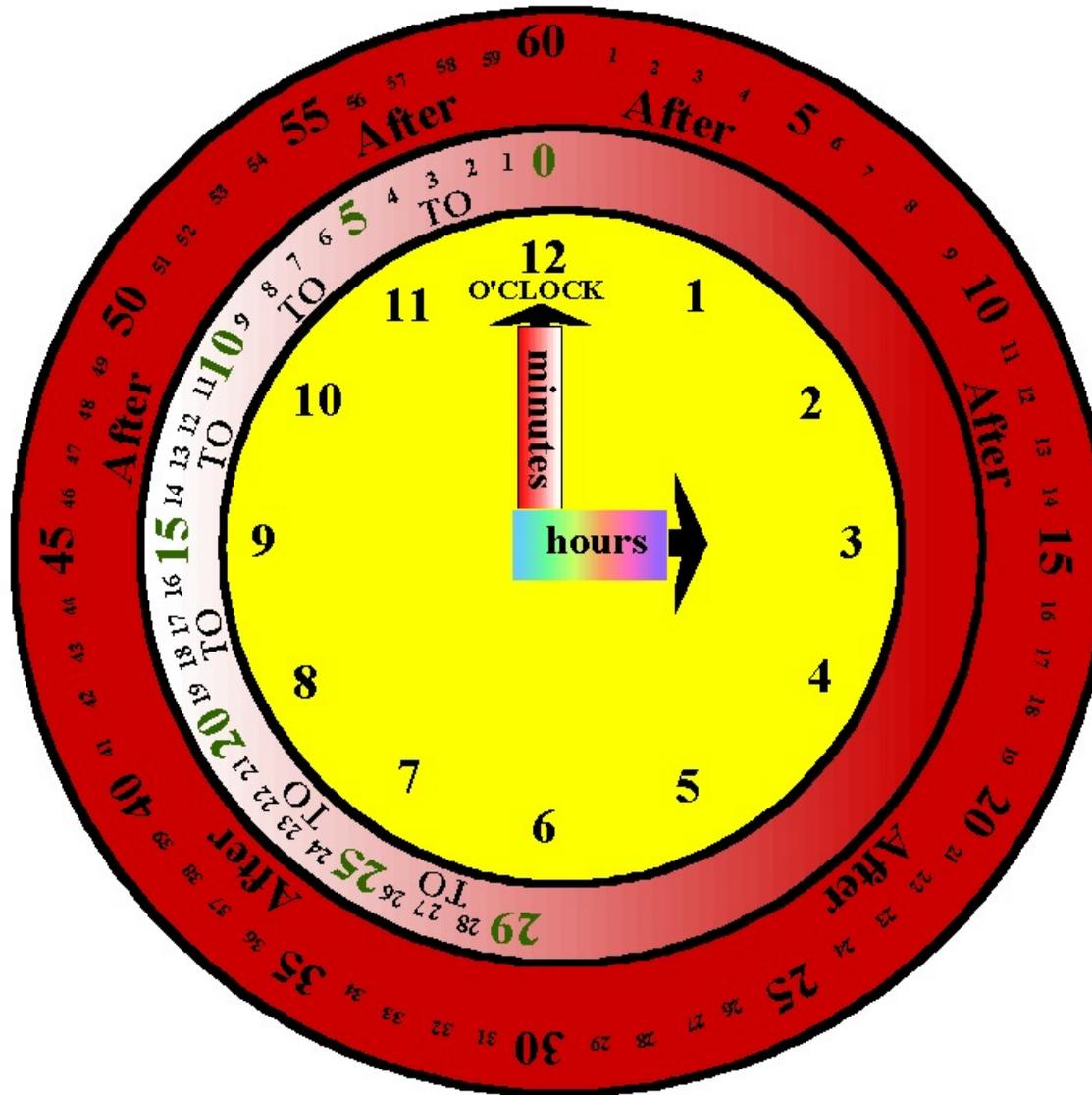
**= 15 To 1**

**= 1/4 To 1**



Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

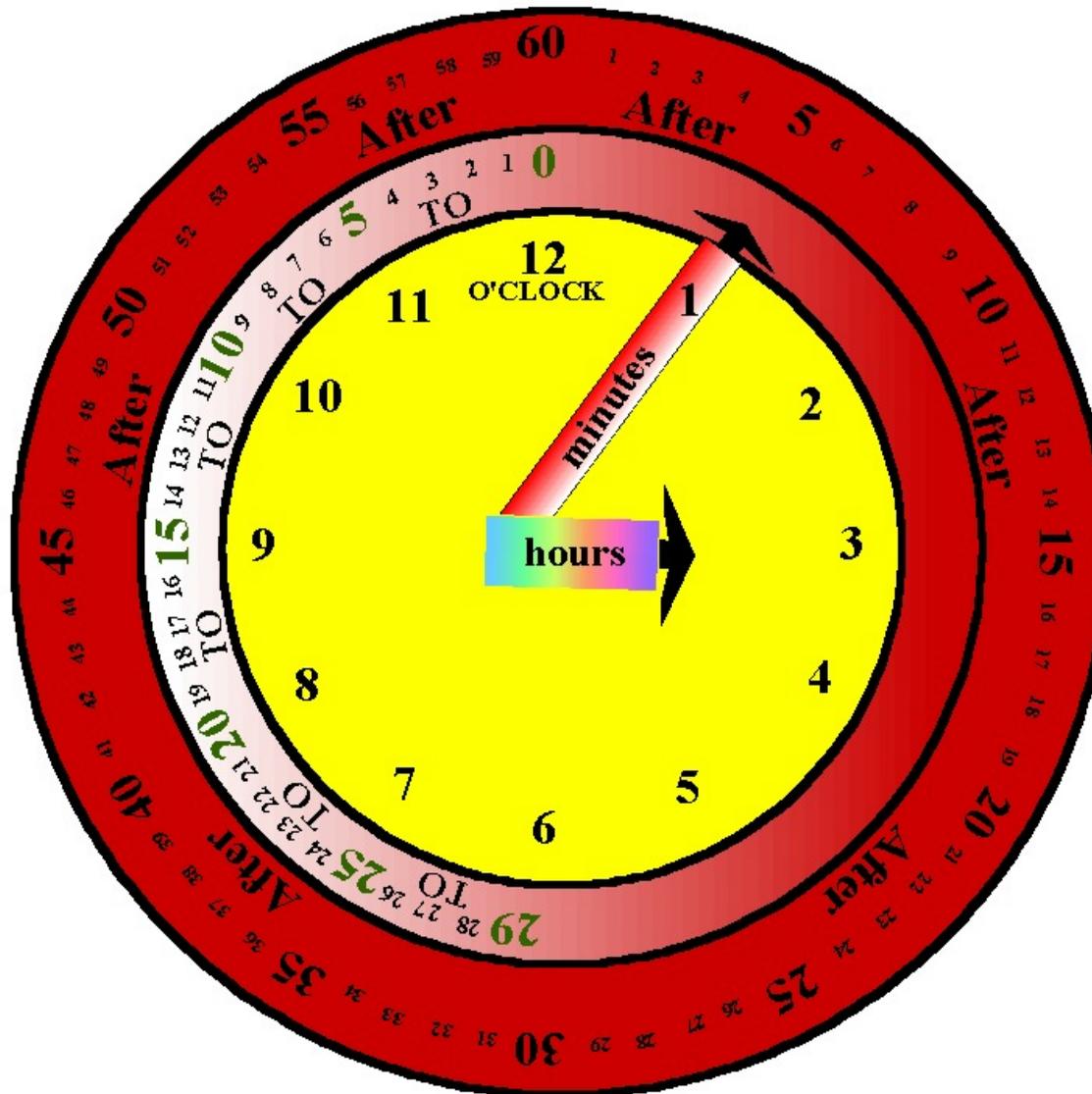
**3:00**  
**= 3 o'clock**



Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

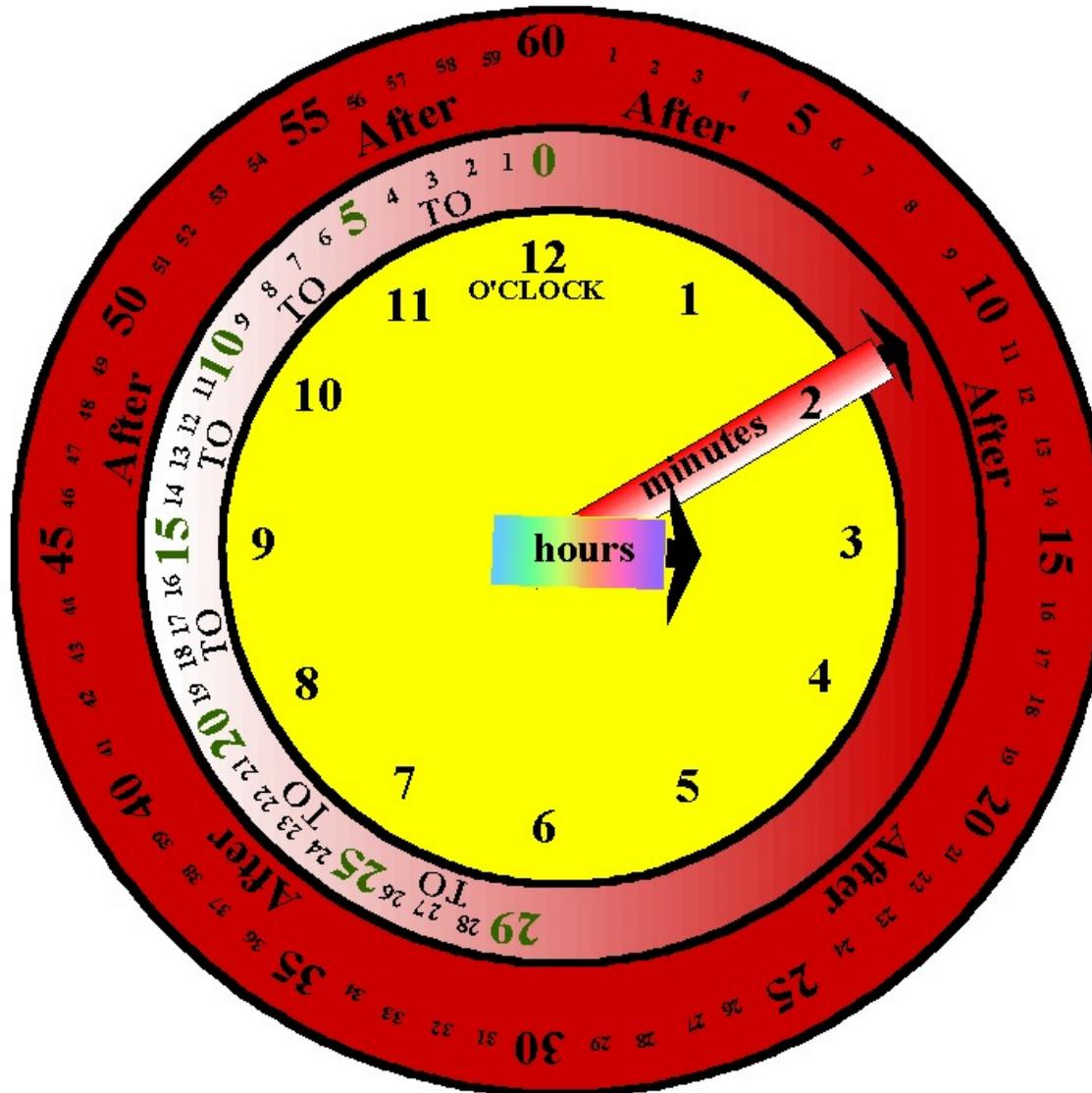
**3:05**

**= 5 After 3**



Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:10**  
**= 10 After 3**

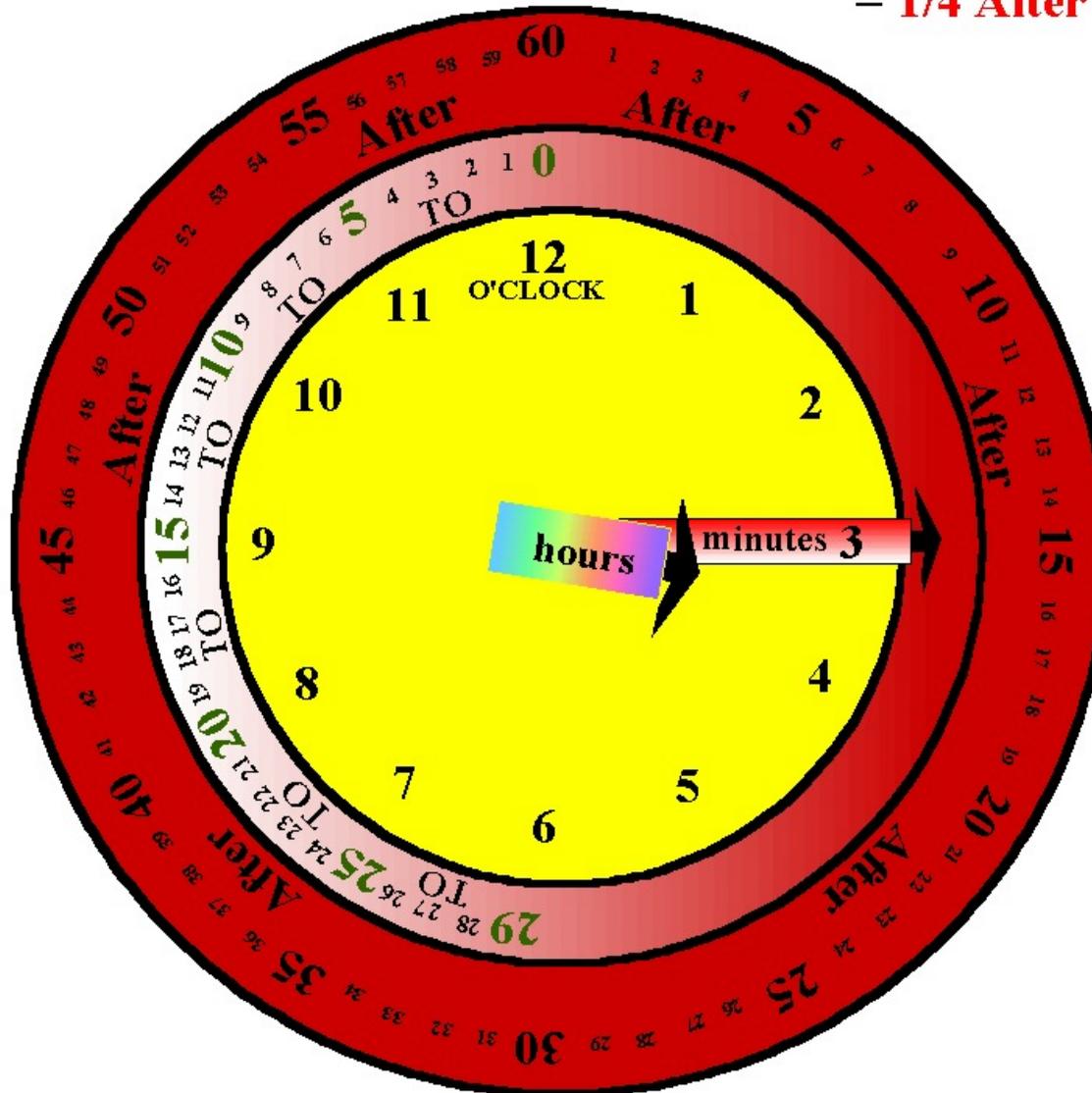


Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:15**

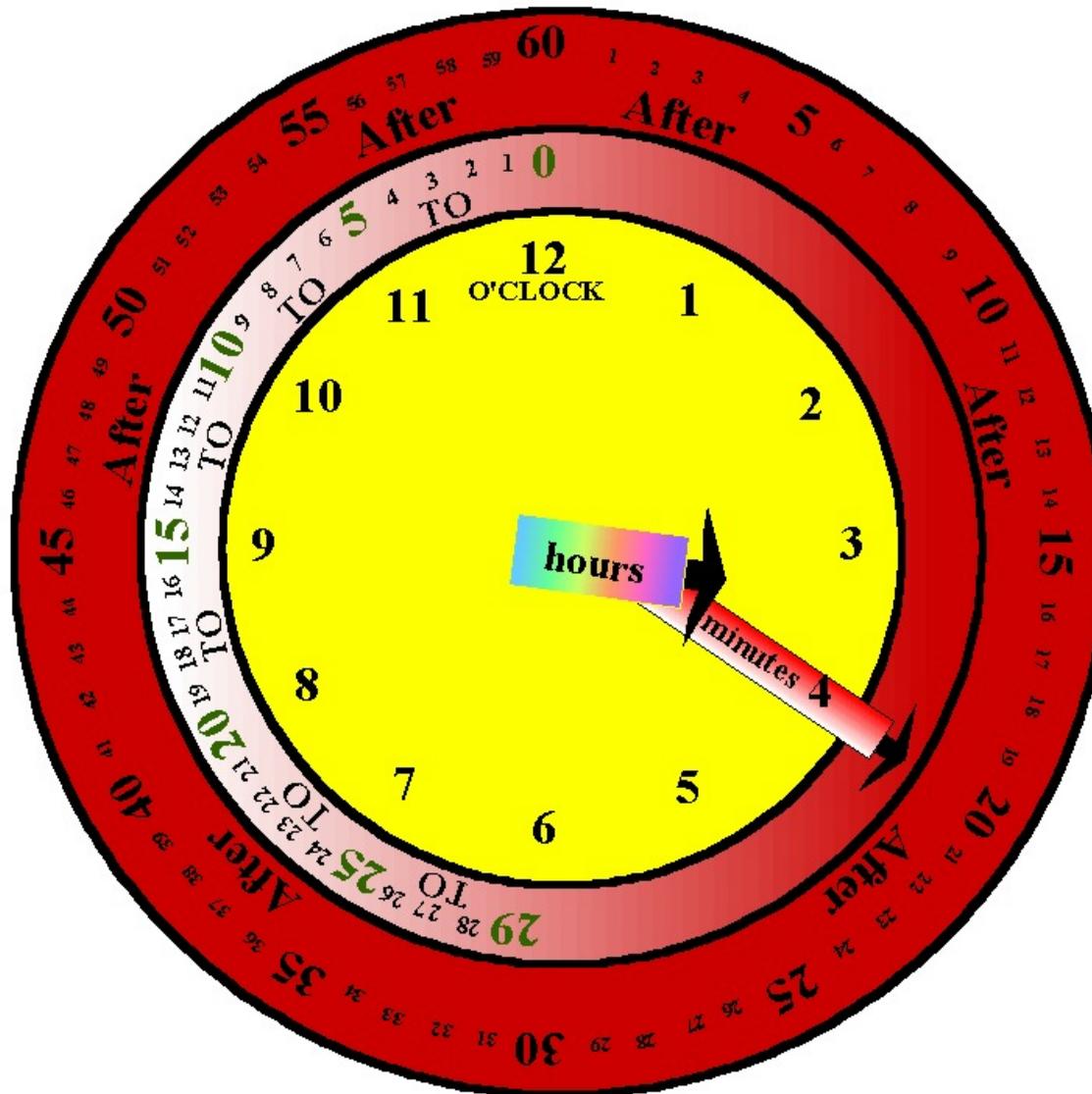
**= 15 After 3**

**= 1/4 After**



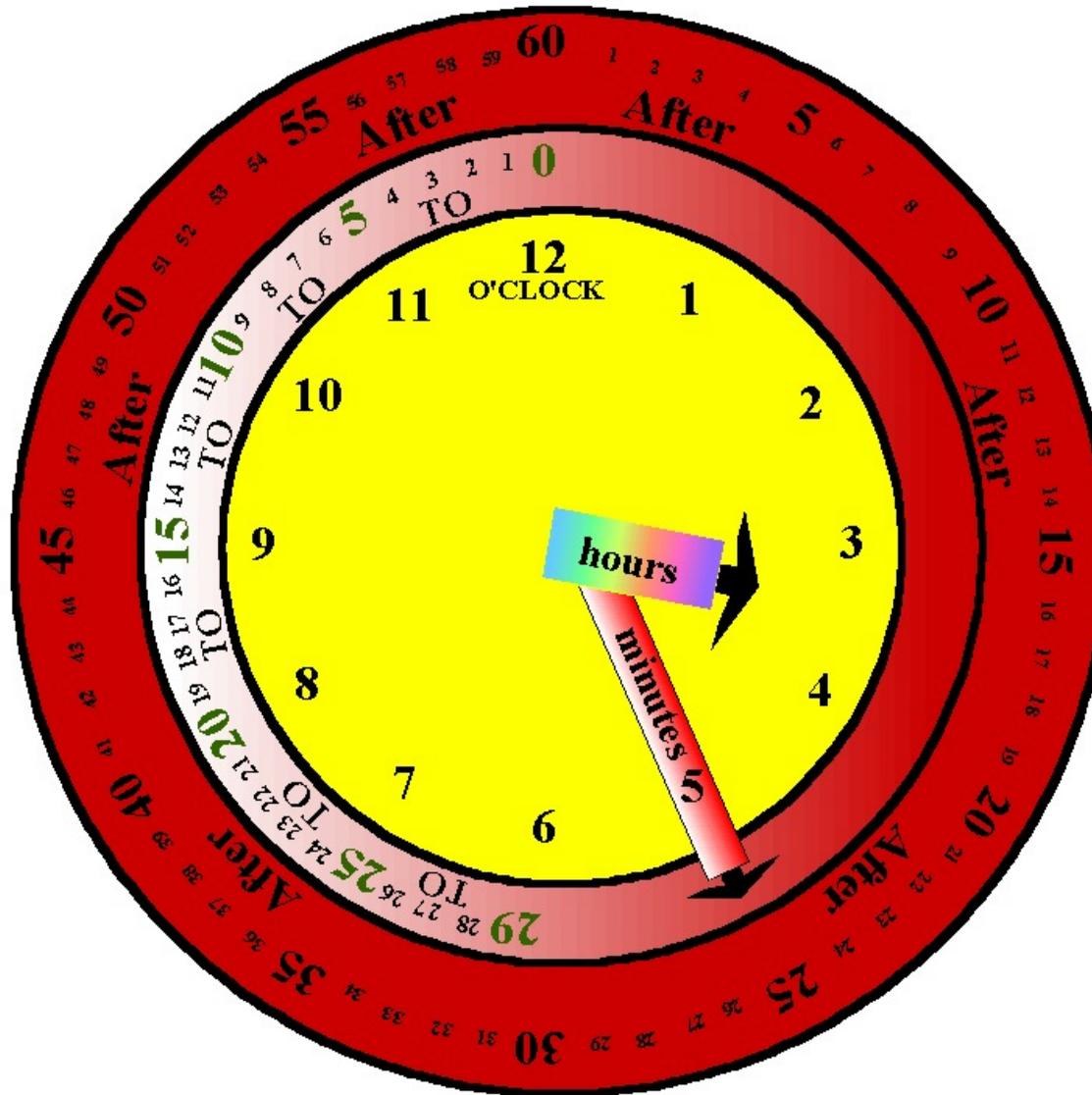
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:20**  
**= 20 After 3**



Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:25**  
**= 25 After 3**

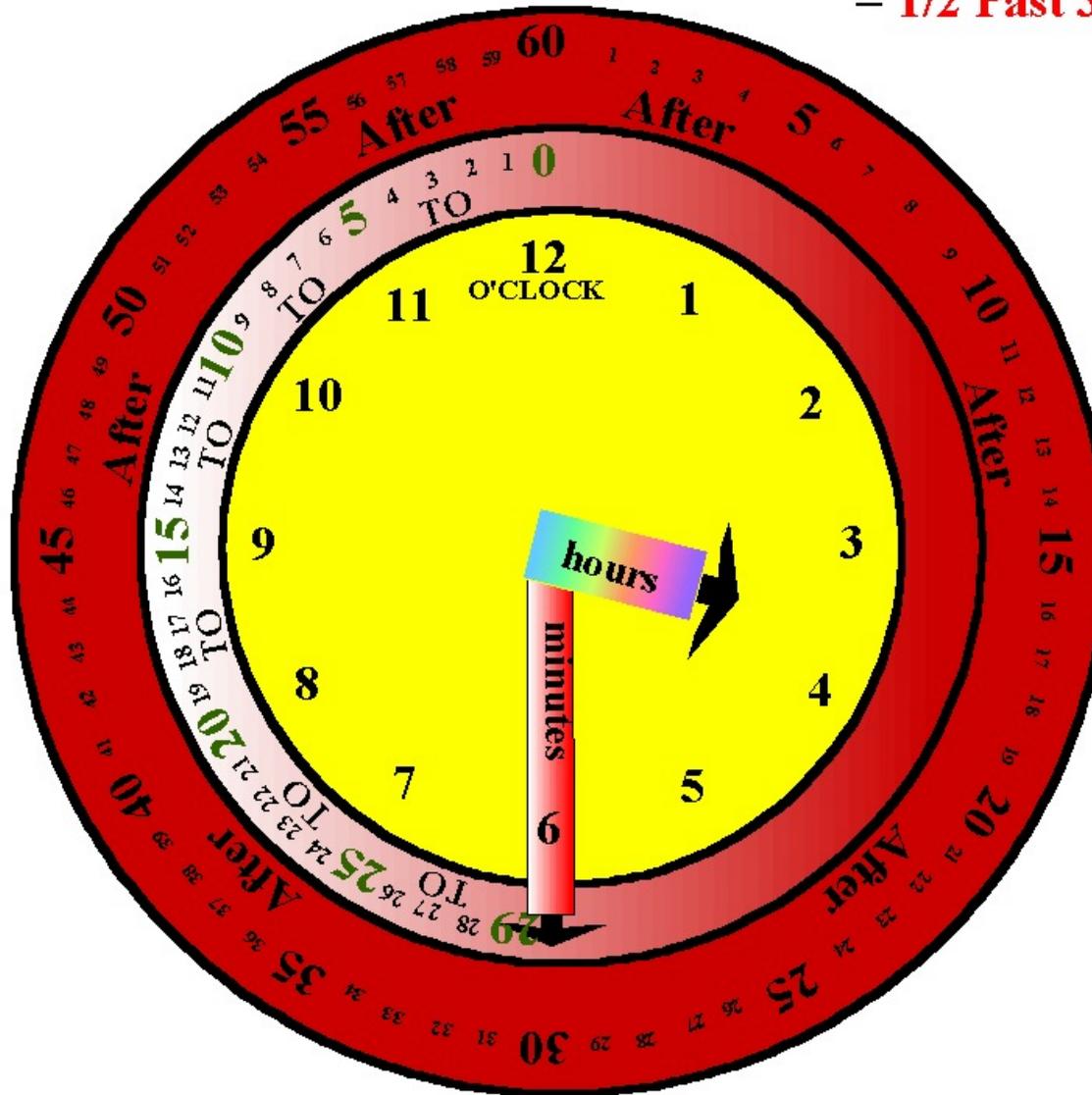


Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:30**

**= 30 After 3**

**= 1/2 Past 3**

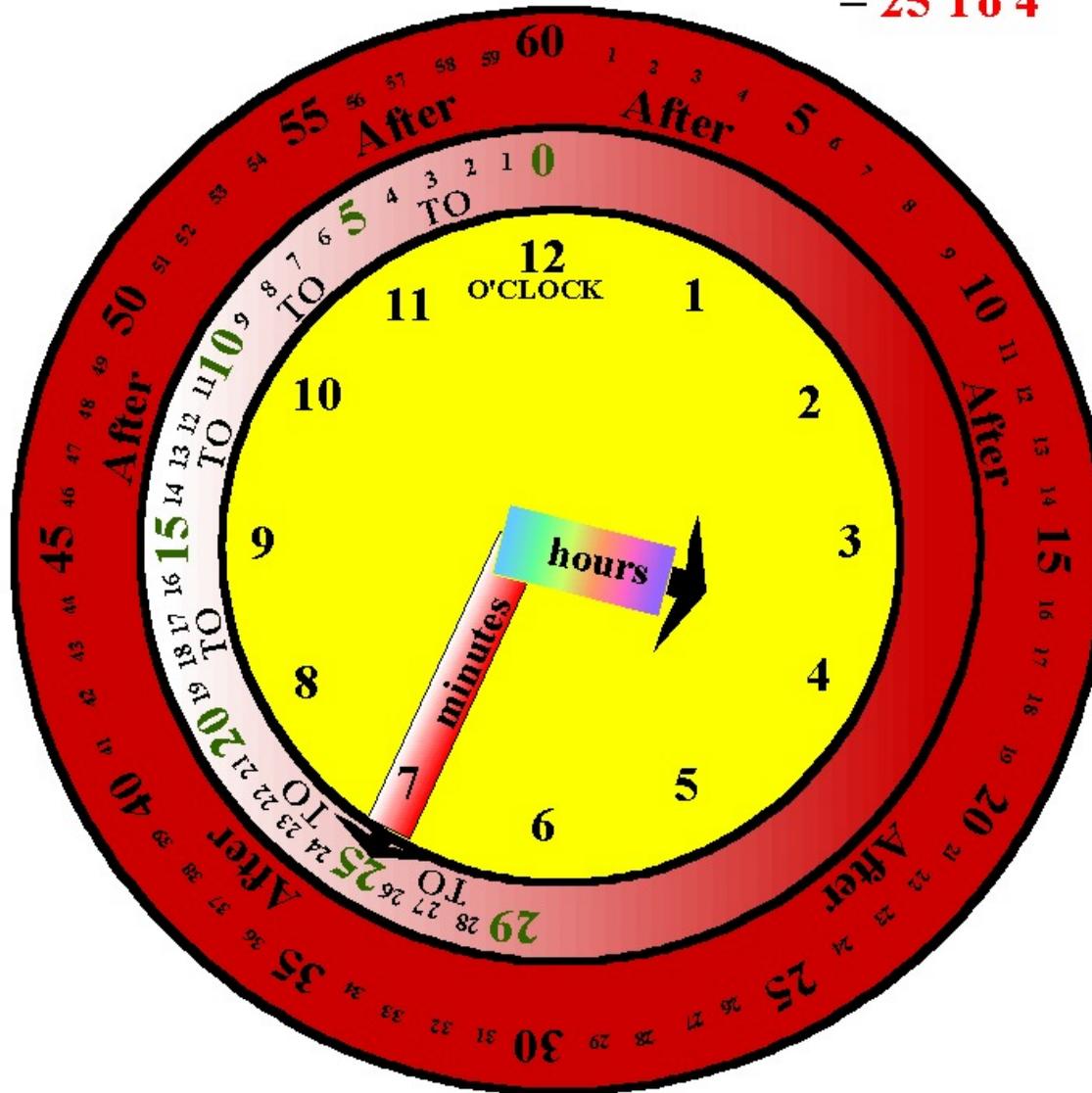


Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:35**

**= 35 After 3**

**= 25 To 4**

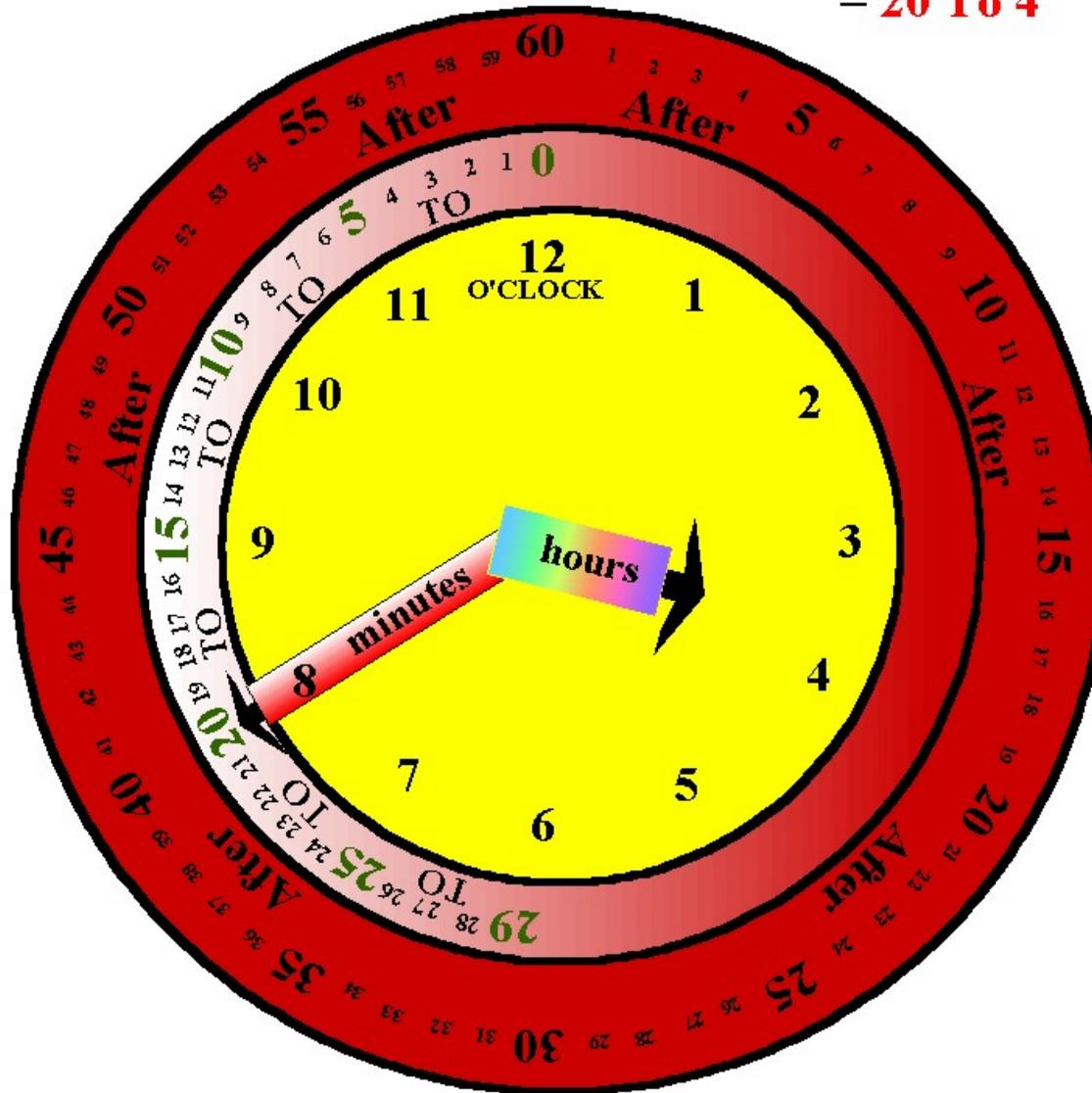


Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:40**

**= 40 After 3**

**= 20 To 4**



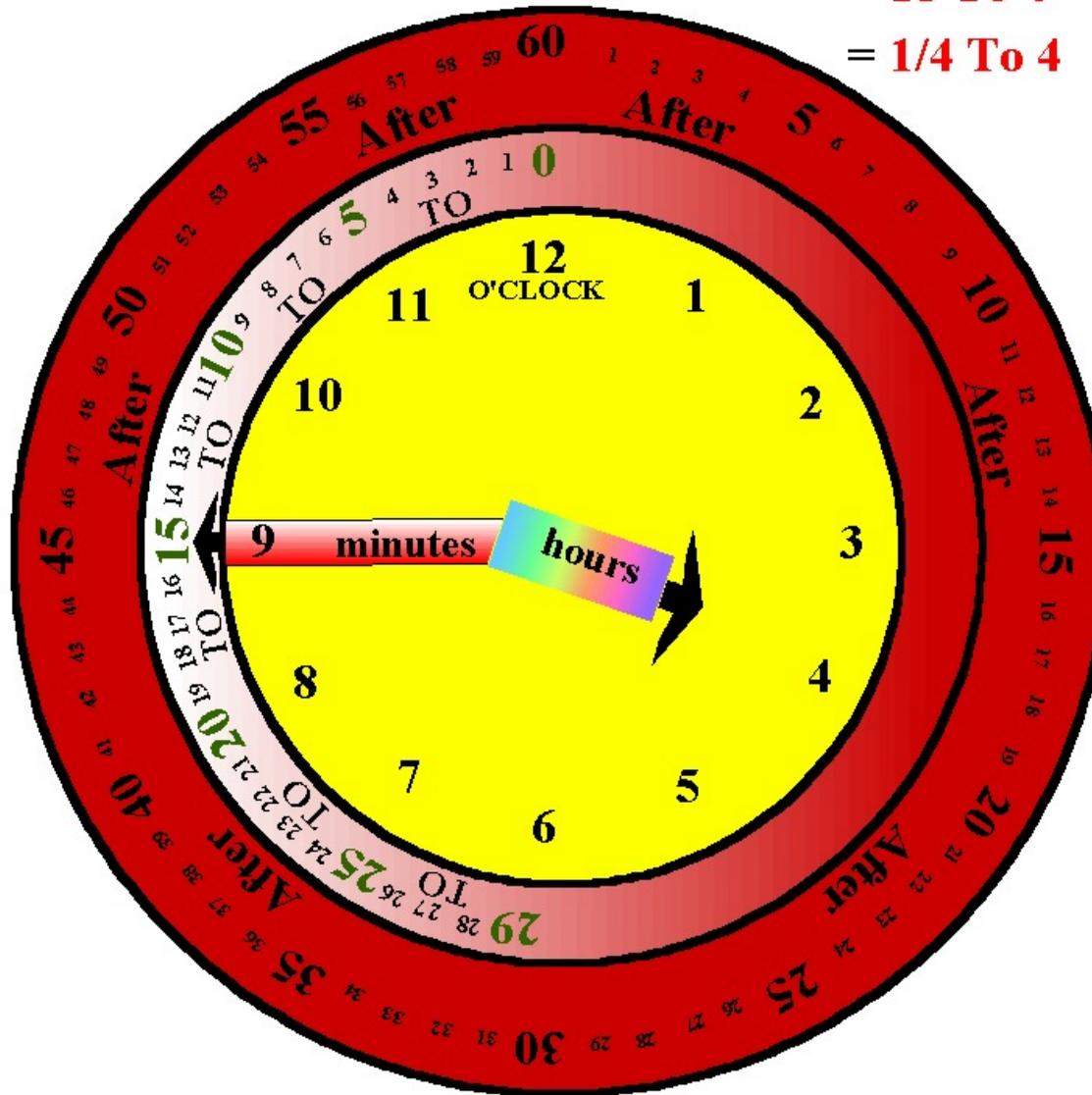
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:45**

= **45 After 3**

= **15 To 4**

= **1/4 To 4**

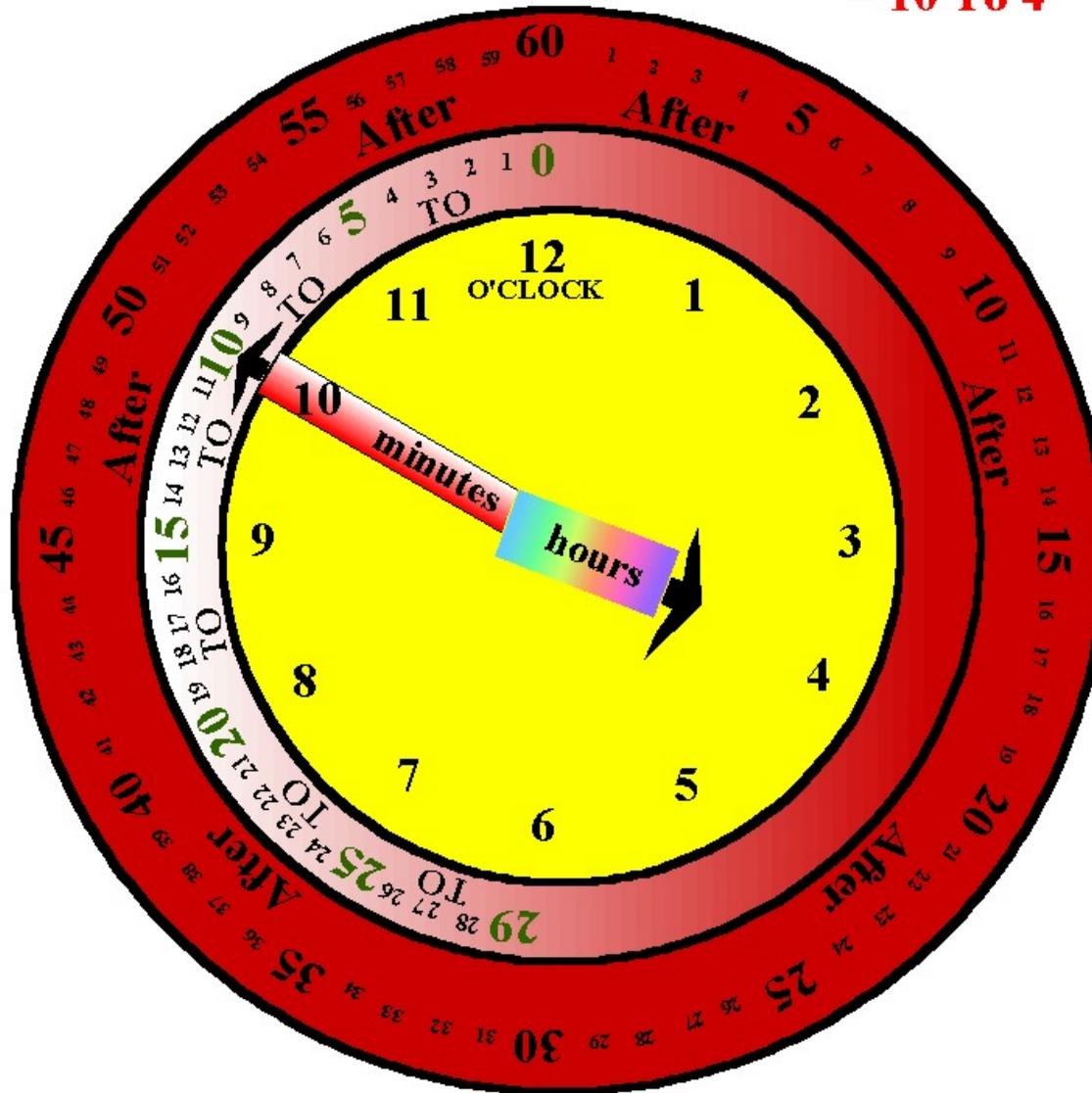


Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:50**

= **50 After 3**

= **10 To 4**

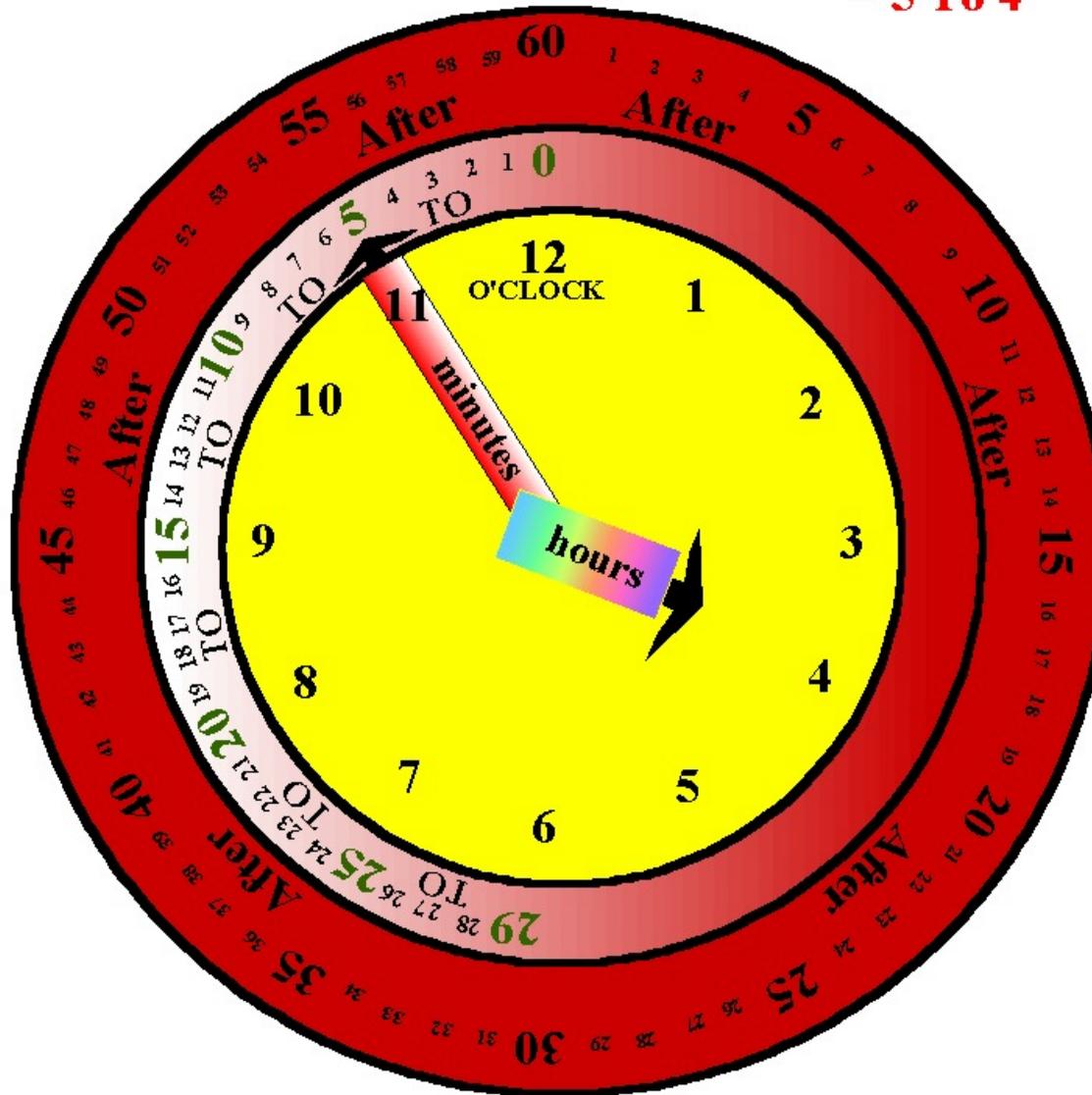


Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**3:55**

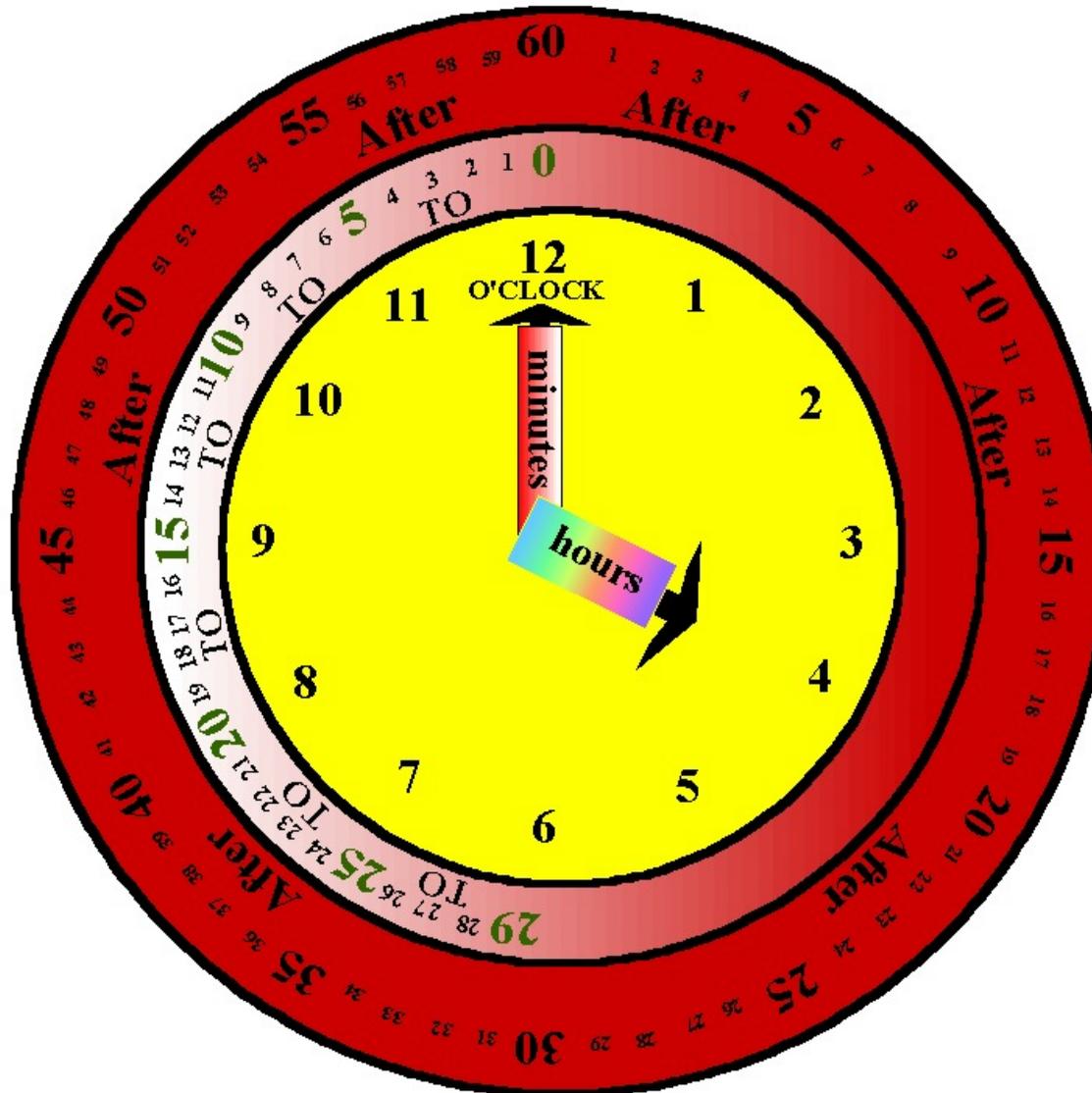
= **55 After 3**

= **5 To 4**



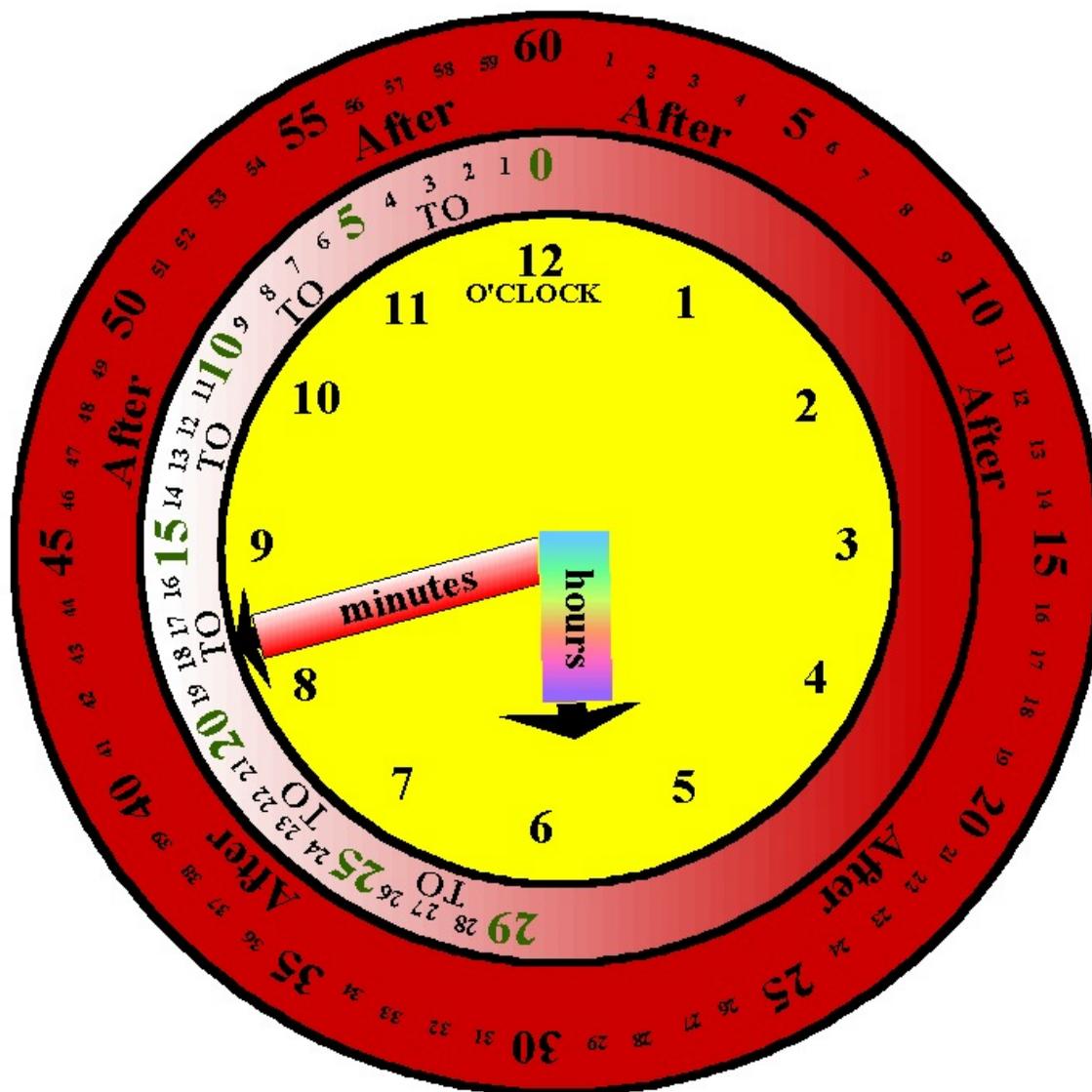
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

**4:00**  
**= 4 o'clock**



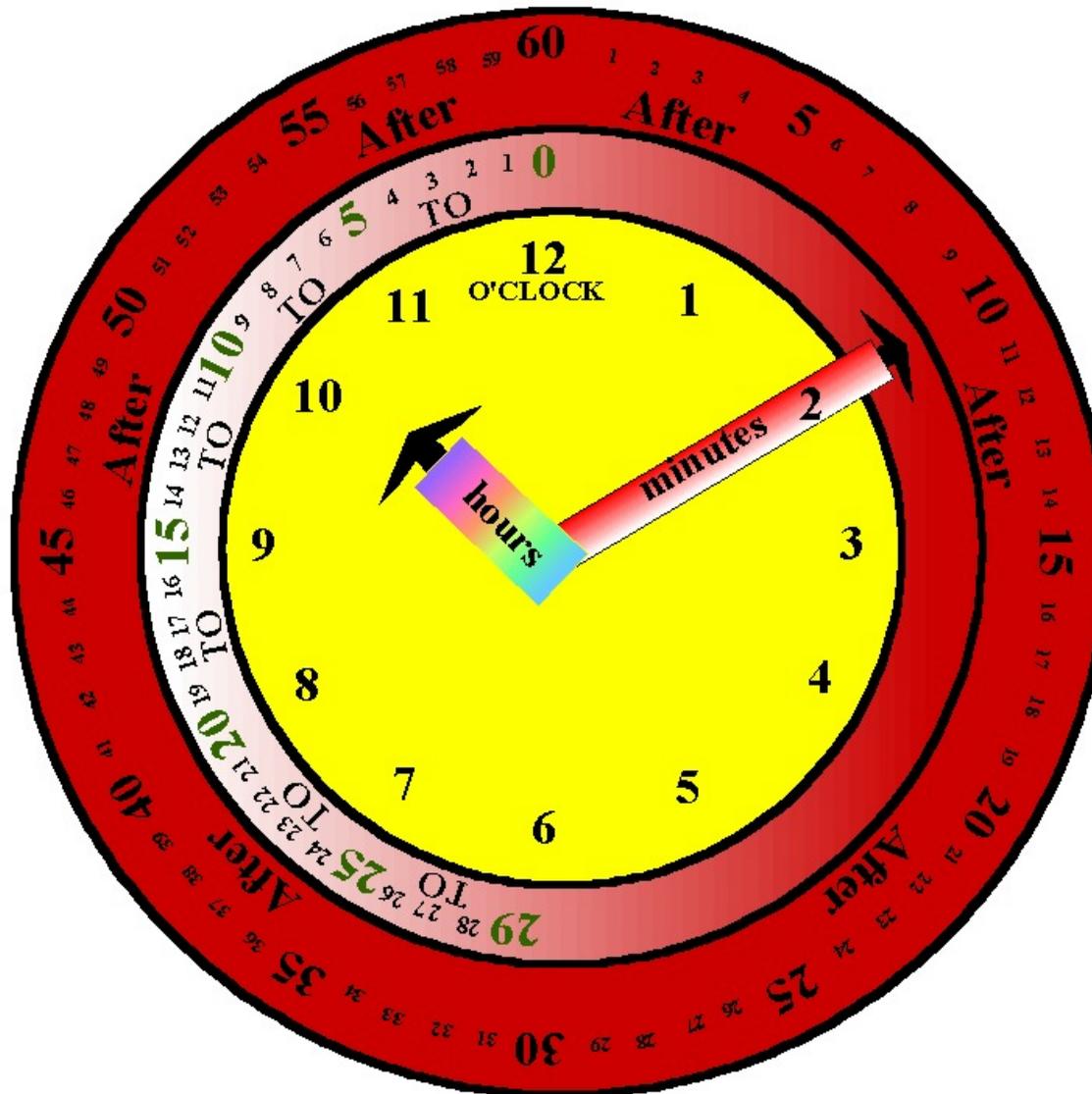
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

# What Time Is It?



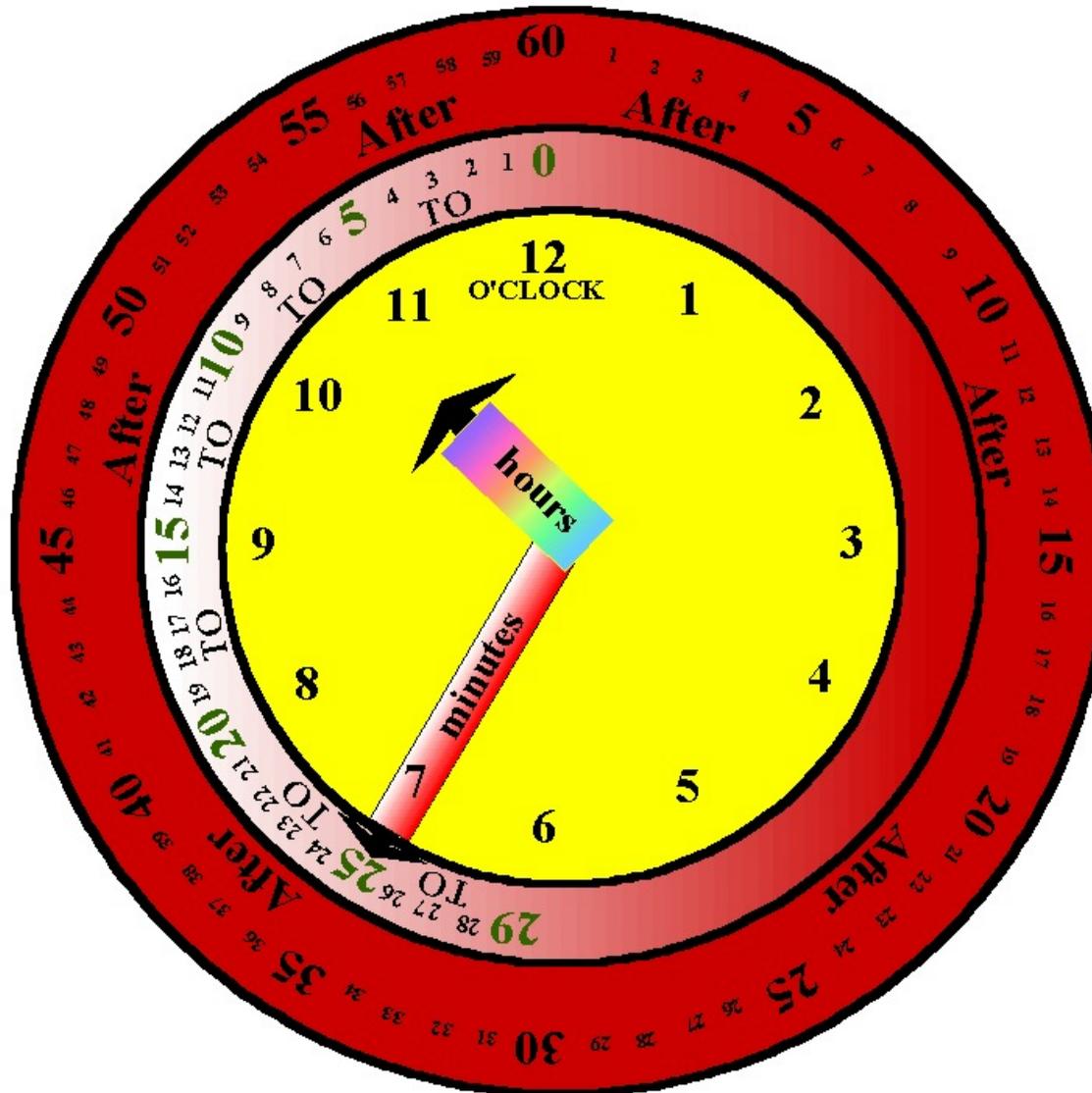
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

# What Time Is It?



Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

# What Time Is It?



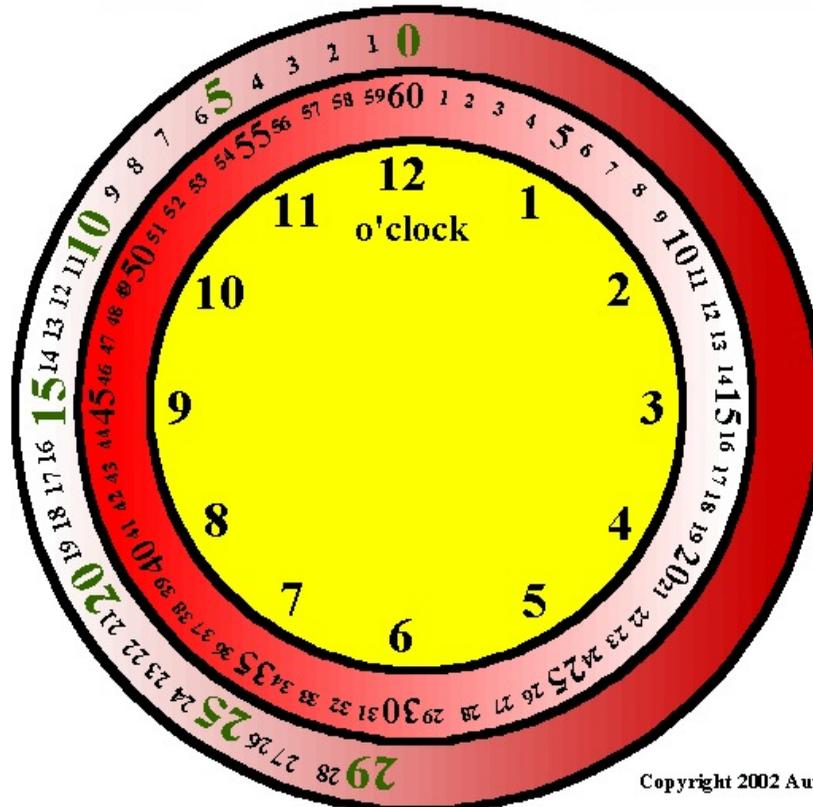
Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

# Table Of Equivalents

<b>HOUR</b>	<b>= Minutes After</b>	<b>= Minutes To</b>
<b>1</b>	<b>5</b>	
<b>2</b>	<b>10</b>	
<b>3</b>	<b>15</b>	
<b>4</b>	<b>20</b>	
<b>5</b>	<b>25</b>	
<b>6</b>	<b>30</b>	
<b>7</b>	<b>35</b>	<b>25</b>
<b>8</b>	<b>40</b>	<b>20</b>
<b>9</b>	<b>45</b>	<b>15</b>
<b>10</b>	<b>50</b>	<b>10</b>
<b>11</b>	<b>55</b>	<b>5</b>
<b>12</b>	<b>60 = o'clock</b>	<b>0 = o'clock</b>

# Table Of Equivalents

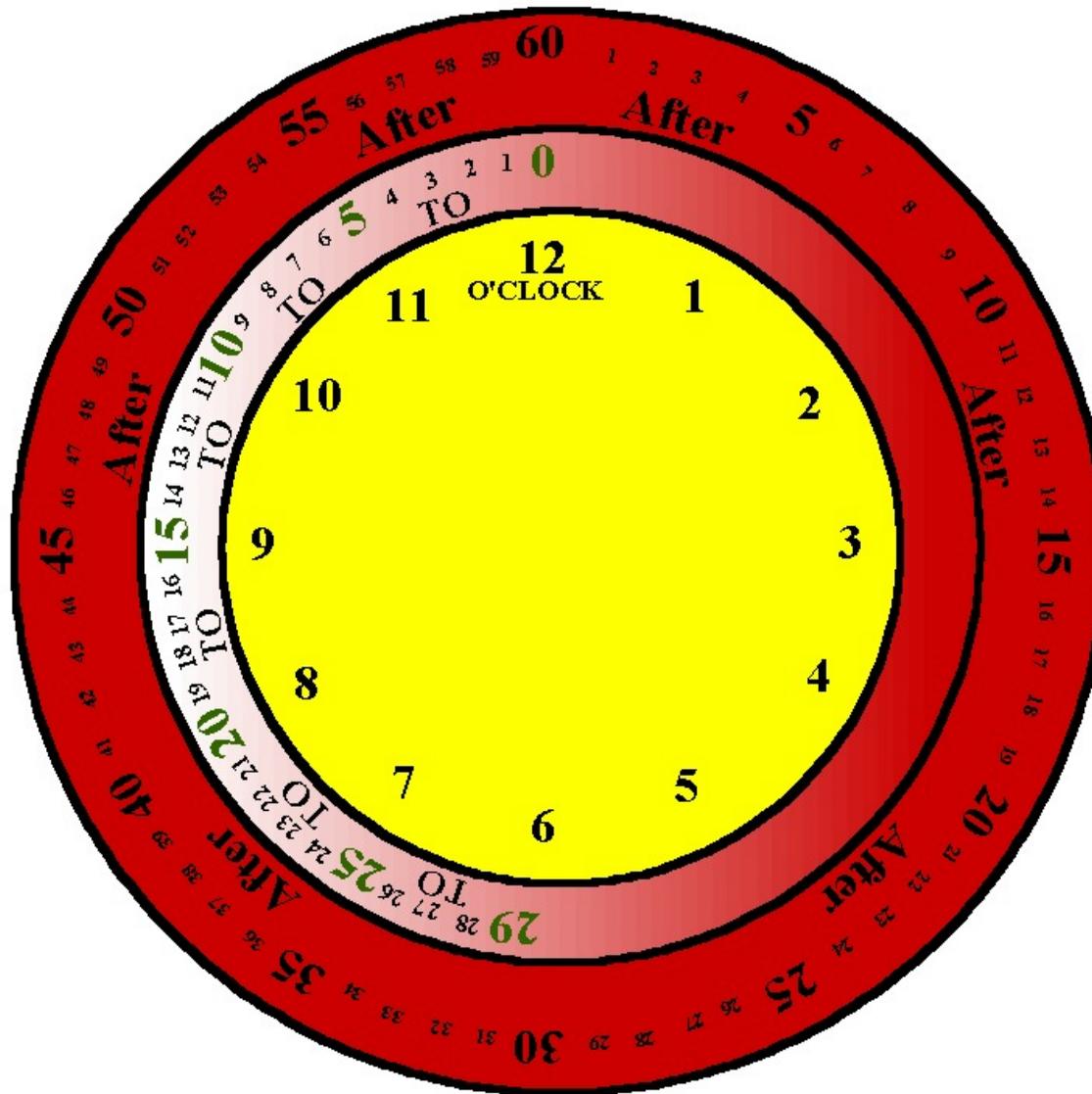
HOUR	= Minutes After	= Minutes To
1	5	
2	10	
3	15	
4	20	
5	25	
6	30	
7	35	25
8	40	20
9	45	15
10	50	10
11	55	5
12	60 = o'clock	0 = o'clock



# Fill In The Missing Numbers...

HOUR	= Minutes After	= Minutes To
1		
2		
	15	
	20	
5		
6		
7	35	25
	40	
9		
	50	
	55	5
12	60 = o'clock	

# Practice Clock...



Note: Since most people do not tell time using seconds, **the second hand is not shown here.**

# What Time Is It?

2: 12:48 <sup>AM</sup>

2:12 <sup>AM</sup>

7: 46:27 <sup>PM</sup>

7:46 <sup>PM</sup>

12: 00:27 <sup>PM</sup>

12:00 <sup>PM</sup>

