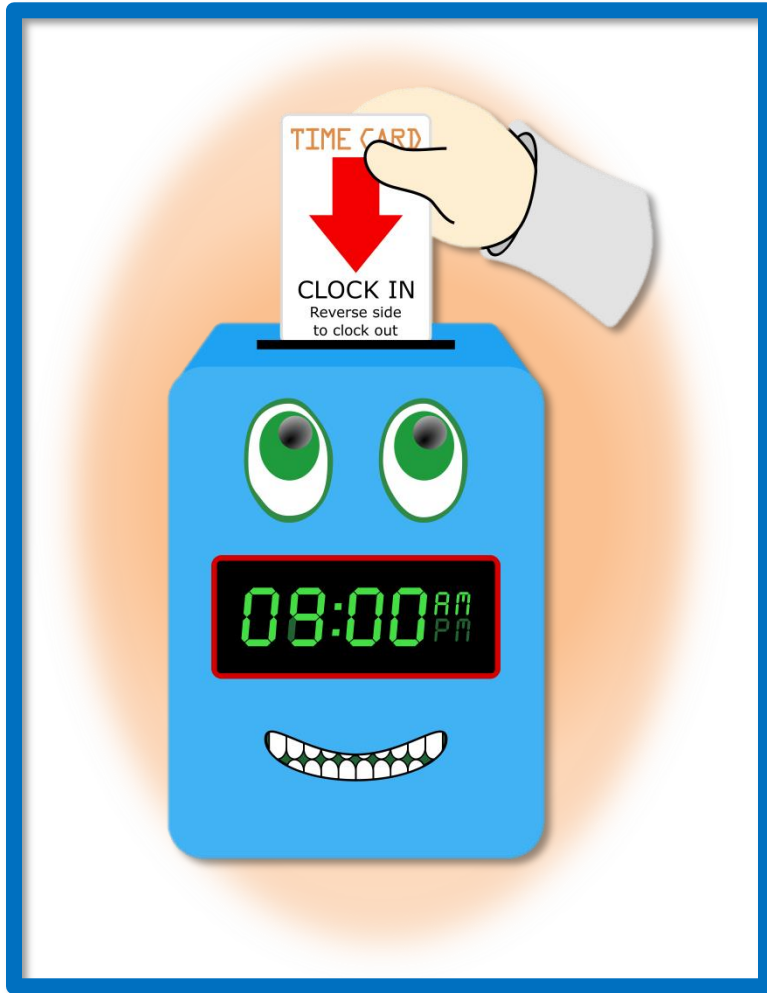


# CALCULATING WAGES & INCOME



## Personal Finance: Time Card Math

Do the math to make sure you are getting paid correctly.



# Lesson Objective

Students will learn how to calculate their hours worked and wages earned based on a time card.



# Time Card

A time card show you and your employer what time you stopped and started working. It is used to calculate your paycheck.

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total									
Regular									
Overtime									
				Total Hourly Wages:					



# Time Card

This time card show that you started work on Monday at 7:45.

Hourly Pay Rate:	<b>\$7.98</b>						
	Mon	Tue	Wed	Thur	Fri		
In	7:45	8:00	8:00	7:15	7:15		
Out	10:00	10:15	11:00	11:00	12:00		
Lunch							
In	1:00	1:45	1:00	1:00	1:15	Total	
Out	6:30	5:15	6:45	5:00	6:00	Hours	Pay
Total							
Regular							
Overtime							
				Total Hourly Wages:			



# Time Card

You took a break at 10:00 and started working again at 1:00.

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total			
Out	6:30	5:15	6:45	5:00	6:00	Hours	Pay		
Total									
Regular									
Overtime									
				Total Hourly Wages:					



# Time Card

You finished working for the day at 6:30.

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total									
Regular									
Overtime									
				Total Hourly Wages:					



# Time Card

You finished working for the day at 6:30.  
 But how many total hours  
 did you work that day?

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total									
Regular									
Overtime									
				Total Hourly Wages:					



# Calculating Time

To calculate time, subtract the time you started from the time you finished.

**Step 1:** Deal with AM and PM by adding 12 to the PM number. So 5pm = 17





# Calculating Time

To calculate time, subtract the time you started from the time you finished.

**Step 1:** Deal with AM and PM by adding 12 to the PM number. So 5:30pm = 17:30

**Step 2:** Now subtract the start time of 10:00am from the finish time of 17:30 (aka 5:30pm).

$$\begin{array}{r} 17:30 \\ -10:00 \\ \hline 7:30 \end{array}$$



# Calculating Time

What about when we have to borrow time?

Ex: I start working at 8:30am  
and I finish at 5:15pm?



# Calculating Time

What about when we have to borrow time?

Ex: I start working at 8:30am  
and I finish at 5:15pm?

Step 1:  $5:15 + 12:00 = 17:15$

Step 2: 
$$\begin{array}{r} 17:15 \\ - 8:30 \\ \hline \end{array}$$
 ← To do this math,  
we need to  
borrow an hour.



# Calculating Time

What about when we have to borrow time?

Ex: I start working at 8:30am  
and I finish at 5:15pm?

Step 1:  $5:15 + 12:00 = 17:15$

Step 2: 
$$\begin{array}{r} \cancel{17}:15 \\ + \quad :60 \\ \hline 16:75 \end{array}$$
 ← Remember that there are 60 minutes in an hour.



# Calculating Time

What about when we have to borrow time?

Ex: I start working at 8:30am  
and I finish at 5:15pm?

Step 1:  $5:15 + 12:00 = 17:15$

Step 2:

$$\begin{array}{r} 16:75 \\ - 8:30 \\ \hline \end{array}$$

Now you can finish  
the math.



# Calculating Time

What about when we have to borrow time?

Ex: I start working at 8:30am  
and I finish at 5:15pm?

Step 1:  $5:15 + 12:00 = 17:15$

Step 2:

$$\begin{array}{r} 16:75 \\ - 8:30 \\ \hline 8:45 \end{array}$$

You worked for 8  
hours and 45  
minutes!



# Practice

## Do the math for Monday

	Mon
In	7:45
Out	10:00
Lunch	
In	1:00
Out	6:30
Total	
Regular	
Overtime	



# Practice

## Do the math for Monday

	Mon
In	7:45
Out	10:00
Lunch	
In	1:00
Out	6:30
Total	
Regular	
Overtime	

$$\begin{array}{r} 10:00 \\ - 7:45 \\ \hline \end{array} = \begin{array}{r} 9:60 \\ - 7:45 \\ \hline 2:25 \end{array}$$





# Practice

## Do the math for Monday

	Mon
In	7:45
Out	10:00
Lunch	
In	1:00
Out	6:30
Total	
Regular	
Overtime	

$$\begin{array}{r} 10:00 \\ - 7:45 \\ \hline \end{array} = \begin{array}{r} 9:60 \\ - 7:45 \\ \hline 2:25 \end{array}$$

$$\begin{array}{r} 6:30 \\ - 1:00 \\ \hline 5:30 \end{array}$$



# Practice

## Do the math for Monday

	Mon
In	7:45
Out	10:00
Lunch	
In	1:00
Out	6:30
Total	
Regular	
Overtime	

$$\begin{array}{r} 10:00 \\ - 7:45 \\ \hline \end{array} = \begin{array}{r} 9:60 \\ - 7:45 \\ \hline 2:25 \end{array}$$

$$\begin{array}{r} 6:30 \\ - 1:00 \\ \hline 5:30 \end{array}$$



Finally,  
add the  
two times  
together.



# Practice

Do the math for Monday

	Mon
In	7:45
Out	10:00
Lunch	
In	1:00
Out	6:30
Total	
Regular	
Overtime	

$$\begin{array}{r} 6:30 \\ - 1:00 \\ \hline 5:30 \end{array} \quad \begin{array}{r} 9:60 \\ - 7:45 \\ \hline 2:15 \end{array} = 7:45$$

You worked  
7 hours and 55 minutes



# Time Card

Now calculate the total hours, regular hours, and overtime hours for each day.

For regular and overtime, write the time in decimal format.

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total									
Regular									
Overtime									
				Total Hourly Wages:					



# Time Card

Did you remember that overtime is any hours worked over 8 hours in one day?

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total	7:45	5:45	8:45	7:45	9:30	39:30			
Regular	7.75	5.75	8	7.75	8	37.25			
Overtime	0	0	.75	0	1.5	2.25			
				Total Hourly Wages:					



# Time Card

Last of all, calculate the Pay for the week.

37.25 regular hours x \$7.98 per hour =

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total	7:45	5:45	8:45	7:45	9:30	39:30			
Regular	7.75	5.75	8	7.75	8	37.25			
Overtime	0	0	.75	0	1.5	2.25			
				Total Hourly Wages:					



# Time Card

Last of all, calculate the Pay for the week.

37.25 regular hours x \$7.98 per hour =

**\$297.26**

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total			
Out	6:30	5:15	6:45	5:00	6:00	Hours	Pay		
Total	7:45	5:45	8:45	7:45	9:30	39:30			
Regular	7.75	5.75	8	7.75	8	37.25	<b>\$297.26</b>		
Overtime	0	0	.75	0	1.5	2.25			
				Total Hourly Wages:					



# Time Card

Overtime pay is  $\$7.98 \times 1.5 = \$11.97$

$2.25 \text{ hours} \times \$11.97 =$

$\$26.93$

Hourly Pay Rate:		<b>\$7.98</b>						
	Mon	Tue	Wed	Thur	Fri			
In	7:45	8:00	8:00	7:15	7:15			
Out	10:00	10:15	11:00	11:00	12:00			
Lunch								
In	1:00	1:45	1:00	1:00	1:15	Total		
Out	6:30	5:15	6:45	5:00	6:00	Hours	Pay	
Total	7:45	5:45	8:45	7:45	9:30	39:30		
Regular	7.75	5.75	8	7.75	8	37.25	\$297.26	
Overtime	0	0	.75	0	1.5	2.25	\$26.93	
				Total Hourly Wages:				





# Time Card

Regular Pay = \$297.26

Overtime Pay = +\$26.93

Total Pay = \$324.19

Hourly Pay Rate:		<b>\$7.98</b>							
	Mon	Tue	Wed	Thur	Fri				
In	7:45	8:00	8:00	7:15	7:15				
Out	10:00	10:15	11:00	11:00	12:00				
Lunch									
In	1:00	1:45	1:00	1:00	1:15	Total Hours	Pay		
Out	6:30	5:15	6:45	5:00	6:00				
Total	7:45	5:45	8:45	7:45	9:30	39:30			
Regular	7.75	5.75	8	7.75	8	37.25	\$297.26		
Overtime	0	0	.75	0	1.5	2.25	\$26.93		
				Total Hourly Wages:				<b>\$324.19</b>	



# Review:

1. I started working at 5:30am and I stopped at 3:15pm. How many hours did I work?
  
2. How much would I get paid for those hours if my pay was \$12.50 an hour?



# Review:

1. I started working at 5:30am and I stopped at 3:15pm. How many hours did I work?

9 hours 45 minutes

2. How much would I get paid for those hours if my pay was \$12.50 an hour?

8 regular hours  $\times$  \$12.50 = \$100.00

1.75 overtime hours  $\times$  18.75 = \$32.81

Total Pay = \$132.81