

24) A warehouse employee at a computer Manufacturer is paid \$11.50 per hour with time and a half for all hours over 40 in a week. Find the employee's gross pay if she worked 46 hours in one week.

Step 1 List variables & details

wage per hour = \$11.50

overtime rate = 1.5
(over 40 hours)

Total employee hours for week = 46

Find gross pay

2nd set up & solve

overtime hours = $46 - 40 = 6$

overtime rate = $\$11.50 * 1.5 \Rightarrow$
 $= \$17.25$

11.5	1 decimal
* 1.5	1 decimal
575	2 decimal
1150	
1725	

gross pay = $40 * \$11.5 + 6 * \17.25
 $= \$460 + \103.50
 $= \$563.50$

Remember order of operations

40	1 dec.	17.25	3 dec.
* 11.5		* 6	
200		10350	
4000		\$ 103.50	
4600			
\$ 460		2 dec.	

3rd Answer using words

Answer At \$11.50 per hour & time and a half, the warehouse employee earned a gross pay of \$563.50 for 46 hours of work.

24.5

If the employees gross pay is \$563.50, calculate the deductions for the following taxes:

1st List variables & details

gross pay = \$563.50

FICA Social Security Rate = .062
Ceiling = 84,900

FICA Medicare Rate = .0145
ceiling = none

Federal Income tax info. Single worker
1 withholding allowances

2nd set up & solve

Social Security Deduction

Because employees Earnings to Date are under the ceiling she is taxed.

563.5 ← 1 decimal
* .062 ← 3 decimal

11270 ← total 4 decimal
338100

349370

Rounded

Round to here greater than 4

\$34.94

FICA Medicare

563.5 ← 1 dec
* .0145 ← 4 dec

.28175 ← 5 dec total
225400
+ 563500

8.17075

Rounded

Round to here Less than 5

\$8.17

Federal Income tax

gross 563.50

Example of table for single weekly

At least	But less than	0	1	2	3
550	560	65	57	49	41
560	570	66	58	51	43
570	580	68	60	52	44

Federal Income tax Withholding = \$58

3rd Write Answer in words.

Answer The deductions for the employee are: FICA SS = \$34.94, FICA M. = \$8.17 and Fed IT = \$58.00