

5-4 EMPLOYEE BENEFITS

To do now:

1. Write down the objectives
2. Take out earbuds

You will need:

- Papers on the student table
- Textbook
- Calculator
- Pen or Pencil
- Notebook Paper

Red Items are needed
during the lecture

OBJECTIVE

Calculate the value of employee benefits.

THE REAL COST



How much does your employer really pay you or for you?

- Paycheck
- Vacation days
- Sick leave
- Taxes
 - Unemployment insurance
 - Match your Social Security and Medicare taxes
- Health Insurance (some)
- Retirement (some)
- Lots more...ex: education/training

Alan works for a printing company.
It has been a little over four years
since he was hired.
He now makes \$54,080 per year.

When he was hired, he was told that he had
five days of paid vacation time.

For each year that he worked at the company,
he would gain another two days of
paid vacation time to a maximum of 20 days.

Example 1

Alan works for a printing company. It has been a little over four years since he was hired. He now makes \$54,080 per year. When he was hired, he was told that he had five days of paid vacation time. For each year that he worked at the company, he would gain another two days of paid vacation time to a maximum of 20 days.

a. How many paid vacation days does he now get at the end of four years of employment?

Create a table:

# of years worked	# of vacation days
0	
1	
2	
3	
4	

Example 1

Alan works for a printing company. It has been a little over four years since he was hired. He now makes \$54,080 per year. When he was hired, he was told that he had five days of paid vacation time. For each year that he worked at the company, he would gain another two days of paid vacation time to a maximum of 20 days.

a. How many paid vacation days does he now get at the end of four years of employment?

Create a table:

# of years worked	# of vacation days
0	5
1	$5 + 2 = 7$
2	$7 + 2 = 9$
3	$9 + 2 = 11$
4	$11 + 2 = 13$

Example 1

Alan works for a printing company. It has been a little over four years since he was hired. He now makes \$91,000 per year. When he was hired, he was told that he had four days of paid vacation time. For each year that he worked at the company, he would gain another three days of paid vacation time to a maximum of 15 days.

b. How much will he make during the time he is on vacation this year?

Step 1: Find his daily pay

$$\text{Daily pay} = \frac{\text{Annual salary}}{(5 \times 52)}$$

$$= \frac{54,080}{260}$$

$$= \$208.00$$

5 days per week with
52 weeks per year

Example 1

Alan works for a printing company. It has been a little over four years since he was hired. He now makes \$54,080 per year. When he was hired, he was told that he had five days of paid vacation time. For each year that he worked at the company, he would gain another two days of paid vacation time to a maximum of 20 days.

b. How much will he make during the time he is on vacation this year?

Step 2: Find his vacation pay

$$\begin{aligned}\text{Vacation pay} &= \text{Daily pay} \times \# \text{ of days} \\ &= 208 \times 13 \\ &= \mathbf{\$2,704.00}\end{aligned}$$

Example 1 – You try it!

Tom works for a bank. It has been a little over 3 years since he was hired. He now makes \$61,100 per year. When he was hired, he was told that he had four days of paid vacation time. For each year that he worked at the company, he would gain another three days of paid vacation time to a maximum of 20 days. How many paid vacation days does he now get at the end of three years of employment and how much will he make during the time he is on vacation this year

Example 1 – You try it!

Tom works for a bank. It has been a little over 3 years since he was hired. He now makes \$61,100 per year. When he was hired, he was told that he had four days of paid vacation time. For each year that he worked at the company, he would gain another three days of paid vacation time to a maximum of 20 days. How many paid vacation days does he now get at the end of three years of employment and how much will he make during the time he is on vacation this year

Create a table:

# of years worked	# of vacation days
0	4
1	$4 + 3 = 7$
2	$7 + 3 = 10$
3	$10 + 3 = 13$

Example 1 – You try it!

Tom works for a bank. It has been a little over 3 years since he was hired. He now makes \$61,100 per year. When he was hired, he was told that he had four days of paid vacation time. For each year that he worked at the company, he would gain another three days of paid vacation time to a maximum of 20 days. How many paid vacation days does he now get at the end of three years of employment and how much will he make during the time he is on vacation this year

Find his daily pay

$$\text{Daily pay} = \frac{\text{Annual salary}}{(5 \times 52)}$$

$$= \frac{61,100}{260}$$

$$= \$235.00$$

Example 1 – You try it!

Tom works for a bank. It has been a little over 3 years since he was hired. He now makes \$61,100 per year. When he was hired, he was told that he had four days of paid vacation time. For each year that he worked at the company, he would gain another three days of paid vacation time to a maximum of 20 days. How many paid vacation days does he now get at the end of three years of employment and how much will he make during the time he is on vacation this year

Find his vacation pay

$$\begin{aligned}\text{Vacation pay} &= \text{Daily pay} \times \# \text{ of days} \\ &= 235 \times 13 \\ &= \mathbf{\$3,055.00}\end{aligned}$$

Frieda's employer offers her health insurance.

Frieda must contribute 12% of the cost, and her employer will cover the rest.

Frieda gets paid on a biweekly basis, and she notices that \$88.50 is taken out of each paycheck for her portion of health care coverage.

How much does Frieda's employer pay for her insurance each year?

Example 2

Frieda's employer offers her health insurance. Frieda must contribute 12% of the cost, and her employer will cover the rest. Frieda gets paid on a biweekly basis, and she notices that \$88.50 is taken out of each paycheck for her portion of health care coverage. How much does Frieda's employer pay for her insurance each year?

Step 1: Determine how much she pays per year

$$\begin{aligned}\text{Annual Employee Payment} &= \text{payment} \times \# \text{ of payments} \\ &= 88.50 \times 26 \\ &= 2,301\end{aligned}$$

Example 2

Frieda's employer offers her health insurance. Frieda must contribute 12% of the cost, and her employer will cover the rest. Frieda gets paid on a biweekly basis, and she notices that \$88.50 is taken out of each paycheck for her portion of health care coverage. How much does Frieda's employer pay for her insurance each year?

Step 2: Determine the total cost per year

$$\begin{aligned}\text{Total cost} &= \frac{\text{annual employee payment}}{\text{employee \% (converted)}} \\ &= \frac{2,301}{.12} \\ &= \$19,175\end{aligned}$$

Example 2

Frieda's employer offers her health insurance. Frieda must contribute 12% of the cost, and her employer will cover the rest. Frieda gets paid on a biweekly basis, and she notices that \$88.50 is taken out of each paycheck for her portion of health care coverage. How much does Frieda's employer pay for her insurance each year?

Step 3: Determine the employers cost per year

Employer's cost = Total Cost x (1 - employee % (converted))

$$= 19,175 \times (1 - .12)$$

$$= \mathbf{\$16,874.00}$$

Example 2 – You try it!

Marco's employer offers health care coverage. Marco pays \$175 out of his monthly paycheck for his share of the total cost. Marco's contribution is 25% of the total cost. What is the employer's cost of Marco's coverage?

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Marco's employer offers health care coverage. Marco pays \$175 out of his monthly paycheck for his share of the total cost. Marco's contribution is 25% of the total cost. What is the employer's cost of Marco's coverage?

Step 1: Determine how much he pays per year

$$\begin{aligned}\text{Annual Employee Payment} &= \text{payment} \times \# \text{ of payments} \\ &= 175 \times 12 \\ &= 2,100\end{aligned}$$

Example 2 – You try it!

Marco's employer offers health care coverage. Marco pays \$175 out of his monthly paycheck for his share of the total cost. Marco's contribution is 25% of the total cost. What is the employer's cost of Marco's coverage?

Step 2: Determine the total cost per year

$$\begin{aligned}\text{Total cost} &= \frac{\text{annual employee payment}}{\text{employee \% (converted)}} \\ &= \frac{2,100}{.25} \\ &= \$8,400\end{aligned}$$

Example 2 – You try it!

Marco's employer offers health care coverage. Marco pays \$175 out of his monthly paycheck for his share of the total cost. Marco's contribution is 25% of the total cost. What is the employer's cost of Marco's coverage?

Step 3: Determine the employers cost per year

Employers cost = Total Cost x (1 – employee % (converted))

$$= 8,400 \times (1 - .25)$$

$$= \mathbf{\$6,300.00}$$

Example 3

Marina works at Washington Performing Arts Center.

Her employer offers her a pension.

Marina is planning on retiring at the end of this year after 25 years of employment.

Marina would receive a pension each year until her death.

Marina's employer uses a formula to calculate the pension.

A retiring employee will receive 1.5% of their average salary for the last five years of employment for every year worked.

Her salaries for the last five years are \$88,900, \$92,200, \$96,000, \$98,000, and \$102,000. Calculate Marina's pension.

Example 3

Marina works at Washington Performing Arts Center. Her employer offers her a pension. Marina is planning on retiring at the end of this year after 25 years of employment. Marina would receive this amount each year until her death. Marina's employer uses a formula to calculate the pension.

A retiring employee will receive 1.5% of their average salary for the last five years of employment for every year worked. Her salaries for the last five years are \$88,900, \$92,200, \$96,000, \$98,000, and \$102,000. Calculate Marina's pension.

$$\text{Pension Formula} = \frac{A \times B}{C} \times D$$

A = % received _____

B = Sum of Salary from Designated Years _____

C = Number Designated Years _____

D = Years worked _____

Example 3

Marina works at Washington Performing Arts Center. Her employer offers her a pension. Marina is planning on retiring at the end of this year after **25 years of employment**. Marina would receive this amount each year until her death. Marina's employer uses a formula to calculate the pension.

A retiring employee will receive **1.5%** of their average salary for **the last five years** of employment for every year worked. Her salaries for the last five years are **\$88,900, \$92,200, \$96,000, \$98,000, and \$102,000**. Calculate Marina's pension.

$$\text{Pension Formula} = \frac{A \times B}{C} \times D$$

$$A = \% \text{ received } \underline{.015}$$

$$B = \text{Sum of Salary from Designated Years } \underline{477,100}$$

$$C = \text{Number Designated Years } \underline{5}$$

$$D = \text{Years worked } \underline{25}$$

Example 3

Marina works at Washington Performing Arts Center. Her employer offers her a pension. Marina is planning on retiring at the end of this year after **25 years of employment**. Marina would receive this amount each year until her death. Marina's employer uses a formula to calculate the pension.

A retiring employee will receive **1.5%** of their average salary for **the last five years** of employment for every year worked. Her salaries for the last five years are **\$88,900**, **\$92,200**, **\$96,000**, **\$98,000**, and **\$102,000**. Calculate Marina's pension.

$$\text{Pension Formula} = \frac{.015 \times 477,100}{5} \times 25 = \$35,782.50$$

A = % received .015

B = Sum of Salary from Designated Years 477,100

C = Number Designated Years 5

D = Years worked 25

Example 3 – You try it!

DeBrown Corporation offers employees a retirement plan based upon the following formula. The retiree will get 2% of the average of the final three year salaries times the number of years employed by the company. An employee's last three years of salaries are 73,000, 75,000, and 77,000, and the employee worked at DeBrown for 32 years. What is the employee's yearly pension?

Example 3 – You try it!

DeBrown Corporation offers employees a retirement plan based upon the following formula. The retiree will get 2% of the average of the final three year salaries times the number of years employed by the company. An employee's last three years of salaries are 73,000, 75,000, and 77,000, and the employee worked at DeBrown for 32 years. What is the employee's yearly pension?

Pension Formula = $A \times \frac{B}{C} \times D$

A = % received .02

$73,000 + 75,000 + 77,000$

B = Sum of Salary from Designated Years 225,000

C = Number Designated Years 3

D = Years worked 32

Example 3 – You try it!

DeBrown Corporation offers employees a retirement plan based upon the following formula. The retiree will get 2% of the average of the final three year salaries times the number of years employed by the company. An employee's last three years of salaries are 73,000, 75,000, and 77,000, and the employee worked at DeBrown for 32 years. What is the employee's yearly pension?

Pension Formula = .02 x $\frac{225,000}{3}$ x 32 = \$48,000.00

- A = % received .02
- B = Sum of Salary from Designated Years $\frac{73,000+75,000+77,000}{3}$ 225,000
- C = Number Designated Years 3
- D = Years worked 32

What do I do now?

The 5-4 Assignment

When is it due?

Next Class