

For Arch MI and Arch MI for Credit Unions

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# Income Fundamentals 202

## Calculating Employment Income

a BACK TO BASICS course



# Legal Disclaimer



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## Calculating Income

- Base Pay:
    - Understanding the Steps.
    - Applying the Steps.
  - Variable Pay:
    - What to Consider.
    - When to Average.
- 

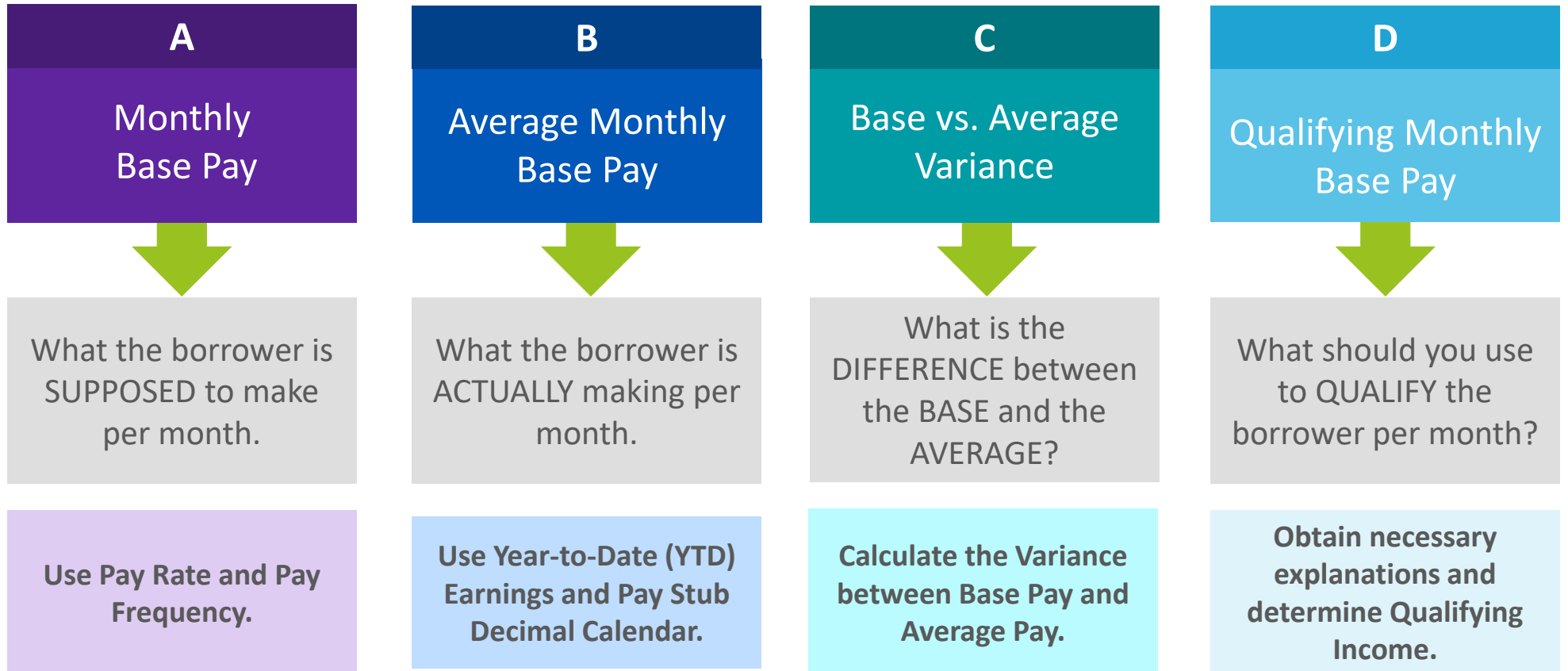


# Paystub Income Calculation

## – Base Pay



# Breakdown for Calculating Income



## Part A — Monthly Pay Base

### Step One

- Determine Pay Rate and Pay Frequency.



### Step Two

- Calculate the Monthly BASE Pay.

**Monthly  
Base Pay**

What the borrower is SUPPOSED to make per month.

# Monthly Base Pay Example



CO	FILE	DEPT	CLOCK	VCHR NO	060
WFC	100145	001003		0000210001	1

*Arch Car Service  
5265 Mortgage Way  
Bayview, VA 12345*

Taxable Marital Status: Married  
Exemptions/Allowances:  
Federal 2  
State 2

Social Security Number: XXX-XX-2222

### EARNINGS STATEMENT

Period Ending: 07/03/20XX  
Pay Date: 07/03/20XX

00000000001  
BRUNO STARS  
65 GEARY STREET  
NORTH BEACH, VA 54321

Earnings	rate	hrs	this period	year to date
Bonus				18,572.00
Regular	2,350.00	80.00	2,350.00	30,000.00
<b>Gross Pay</b>			2,350.00	48,572.00

Other Benefits Information	this period	total to date
G.T.L.	7.79	31.15

Pay Rate



\$2,350

Pay Frequency



Biweekly

# Monthly Base Pay Example

Base Pay Rate:	\$2,350.00
Base Pay Frequency:	Biweekly
$\$2,350 \times 26 = \$61,100/12$	
<b>Monthly Base Pay:</b>	<b>\$5,091.67</b>



## Part B — Average Monthly Pay Base

### Step Three

- Determine YTD Base Earnings and Pay Date Decimal Factor.



### Step Four

- Calculate the Average Base Pay.

**Average  
Monthly Base  
Pay**

What the borrower **ACTUALLY** makes per month.

# Year-to-Date Pay



What is the Pay Date Decimal Factor and why is Year-to-Date Pay important?

It is vital to use an accurate Qualifying Income calculation to determine that the income is “on track.”

# Accuracy Is Important



CO	FILE	DEPT	CLOCK	VCHR NO	060
WFC	100142	001002		0000210002	2

**EARNINGS STATEMENT**

Arch News Network  
2155 Ft. Worth Way  
Dallas, TX 75201

Period Ending: 09/15/20xx  
Pay Date: 09/15/20xx

00000000002  
ANDERSON HOOPER  
1564 MORTGAGE WAY  
IRVING, TX 75014

Taxable Marital Status: Married  
Exemptions/Allowances:  
Federal 3  
State 3

CO	FILE	DEPT	CLOCK	VCHR NO	060
WFC	100142	001002		0000210002	2

**EARNINGS STATEMENT**

Arch News  
2155 Ft. Worth Way  
Dallas, TX 75201

Period Ending: 09/17/20xx  
Pay Date: 09/17/20xx

00000000002  
CHRIS LALLACE  
1564 MORTGAGE WAY  
IRVING, TX 75014

Taxable Marital Status: Married  
Exemptions/Allowances:  
Federal 3  
State 3

Semimonthly



8.5

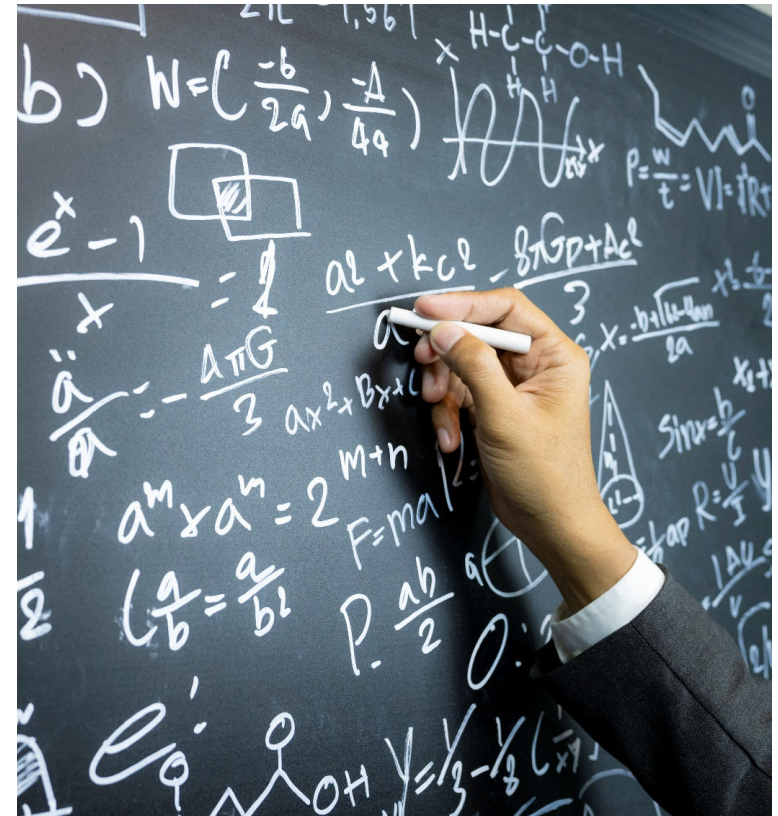
Biweekly



8.5

# The Formula: Calculating the Pay Stub Decimal Factor

1. Period Ending Date from paystub. **8/21/23.**
2. How many full months have passed? **7 – this is your full number.**
3. How many days are in the month? **August has 31 days.**
4. Divide the day by number of days.  **$21/31 = .68$ .**
5. Add decimal to the full number. **7.68 is the factor.**



# Pay Stub Decimal Calendar



## Pay Stub Decimal Calendar

Hourly, Weekly, Biweekly

	Jan	Feb (28)	Feb (29)	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.05	1.04	1.05	2.05	3.05	4.05	5.05	6.05	7.05	8.05	9.05	10.05	11.05
2	0.06	1.07	1.07	2.06	3.07	4.06	5.07	6.06	7.06	8.07	9.06	10.07	11.06
3	0.10	1.11	1.10	2.10	3.10	4.10	5.10	6.10	7.10	8.10	9.10	10.10	11.10
4	0.15	1.14	1.14	2.15	3.15	4.15	5.15	6.15	7.15	8.15	9.15	10.15	11.15
5	0.16	1.18	1.17	2.16	3.17	4.16	5.17	6.16	7.16	8.17	9.16	10.17	11.16
6	0.19	1.21	1.21	2.19	3.20	4.19	5.20	6.19	7.19	8.20	9.19	10.20	11.19
7	0.25	1.25	1.24	2.25	3.25	4.25	5.25	6.25	7.25	8.25	9.25	10.25	11.25
8	0.26	1.29	1.28	2.26	3.27	4.26	5.27	6.26	7.26	8.27	9.26	10.27	11.26
9	0.29	1.32	1.31	2.29	3.30	4.29	5.30	6.29	7.29	8.30	9.29	10.30	11.29
10	0.32	1.36	1.34	2.32	3.33	4.32	5.33	6.32	7.32	8.33	9.32	10.33	11.32
11	0.35	1.39	1.38	2.35	3.37	4.35	5.37	6.35	7.35	8.37	9.35	10.37	11.35
12	0.39	1.45	1.41	2.39	3.40	4.39	5.40	6.39	7.39	8.40	9.39	10.40	11.39
13	0.42	1.46	1.45	2.42	3.43	4.42	5.43	6.42	7.42	8.43	9.42	10.43	11.42
14	0.45	1.50	1.48	2.45	3.47	4.45	5.47	6.45	7.45	8.47	9.45	10.47	11.45
15	0.48	1.54	1.52	2.48	3.50	4.48	5.50	6.48	7.48	8.50	9.48	10.50	11.48
16	0.52	1.57	1.55	2.52	3.53	4.52	5.53	6.52	7.52	8.53	9.52	10.53	11.52
17	0.55	1.61	1.59	2.55	3.57	4.55	5.57	6.55	7.55	8.57	9.55	10.57	11.55
18	0.58	1.64	1.62	2.58	3.60	4.58	5.60	6.58	7.58	8.60	9.58		
19	0.61	1.68	1.66	2.61	3.63	4.61	5.63	6.61	7.61	8.63	9.61		
20	0.65	1.71	1.69	2.65	3.67	4.65	5.67	6.65	7.65	8.67	9.65		
21	0.68	1.75	1.72	2.68	3.70	4.68	5.70	6.68	7.68	8.70	9.68		
22	0.71	1.79	1.76	2.71	3.73	4.71	5.73	6.71	7.71	8.73	9.71		
23	0.74	1.82	1.79	2.74	3.77	4.74	5.77	6.74	7.74	8.77	9.74		
24	0.77	1.86	1.83	2.77	3.80	4.77	5.80	6.77	7.77	8.80	9.77		
25	0.81	1.89	1.86	2.81	3.83	4.81	5.83	6.81	7.81	8.83	9.81		
26	0.84	1.93	1.90	2.84	3.87	4.84	5.87	6.84	7.84	8.87	9.84		
27	0.87	1.96	1.95	2.87	3.90	4.87	5.90	6.87	7.87	8.90	9.87		
28	0.90	2.0	1.97	2.90	3.93	4.90	5.93	6.90	7.90	8.93	9.90		
29	0.94		2.0	2.94	3.97	4.94	5.97	6.94	7.94	8.97	9.94	10.97	11.94
30	0.97			2.97	4.0	4.97	6.0	6.97	7.97	9.0	9.97	11.0	11.97
31	1.0			3.0		5.0		7.0	8.0		10.0		12.0

## Good News!

Arch MI has a **Pay Stub Decimal Calendar** for your reference:

<https://mortgage.archgroup.com/wp-content/uploads/sites/4/MCUS-B1747A-Pay-Stub-Decimal-Calendar.pdf>

### Semi-Monthly

Day	Jan	Feb (28)	Feb (29)	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1-15	0.5	1.5	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5	11.5
16-31	1.0	2.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0

### Monthly

Day	Jan	Feb (28)	Feb (29)	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1-31	1.0	2.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0

# Average Monthly Base Pay Example

CO	FILE	DEPT	CLOCK	VCHR NO	060
WFC	100145	001003		0000210001	1

*Arch Car Service  
5265 Mortgage Way  
Bayview, VA 12345*

Taxable Marital Status: Married  
Exemptions/Allowances:  
Federal 2  
State 2

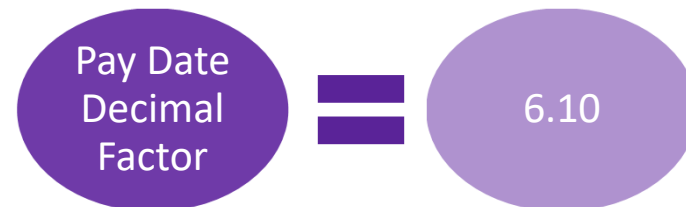
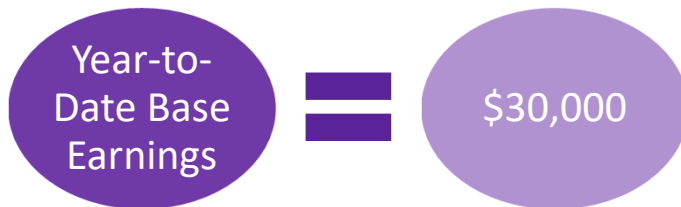
Social Security Number: XXX-XX-2222

### EARNINGS STATEMENT

Period Ending: 07/03/20XX  
Pay Date: 07/03/20XX

00000000001  
BRUNO STARS  
65 GEARY STREET  
NORTH BEACH, VA 54321

Earnings	rate	hrs	this period	year to date	Other Benefits Information	this period	total to date
Bonus				18,572.00			
Regular	2,350.00	80.00	2,350.00	30,000.00	G.T.L.	7.79	31.15
<b>Gross Pay</b>			2,350.00	48,572.00			



# Average Monthly Base Pay — Pay Date Decimal Calendar



**Arch MI academy**

**Pay Stub Decimal Calendar**

Hourly, Weekly, Biweekly

	Jan	Feb (28)	Feb (29)	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.03	1.04	1.05	2.05	3.07	4.05	5.05	6.05	7.05	8.05	9.05	10.05	11.05
2	0.06	1.07	1.07	2.06	3.07	4.06	5.07	6.06	7.06	8.07	9.06	10.07	11.06
3	0.10	1.11	1.10	2.10	3.10	4.10	5.10	6.10	7.10	8.10	9.10	10.10	11.10
4	0.13	1.14	1.14	2.13	3.13	4.13	5.13	6.13	7.13	8.13	9.13	10.13	11.13
5	0.16	1.18	1.17	2.16	3.17	4.16	5.17	6.16	7.16	8.17	9.16	10.17	11.16
6	0.19	1.21	1.21	2.19	3.20	4.19	5.20	6.19	7.19	8.20	9.19	10.20	11.19
7	0.23	1.25	1.24	2.23	3.23	4.23	5.23	6.23	7.23	8.23	9.23	10.23	11.23
8	0.26	1.29	1.28	2.26	3.27	4.26	5.27	6.26	7.26	8.27	9.26	10.27	11.26
9	0.29	1.32	1.31	2.29	3.30	4.29	5.30	6.29	7.29	8.30	9.29	10.30	11.29
10	0.32	1.36	1.34	2.32	3.33	4.32	5.33	6.32	7.32	8.33	9.32	10.33	11.32
11	0.35	1.39	1.38	2.35	3.37	4.35	5.37	6.35	7.35	8.37	9.35	10.37	11.35
12	0.39	1.43	1.41	2.39	3.40	4.39	5.40	6.39	7.39	8.40	9.39	10.40	11.39
13	0.42	1.46	1.45	2.42	3.43	4.42	5.43	6.42	7.42	8.43	9.42	10.43	11.42
14	0.45	1.50	1.48	2.45	3.47	4.45	5.47	6.45	7.45	8.47	9.45	10.47	11.45
15	0.48	1.54	1.52	2.48	3.50	4.48	5.50	6.48	7.48	8.50	9.48	10.50	11.48
16	0.52	1.57	1.55	2.52	3.53	4.52	5.53	6.52	7.52	8.53	9.52	10.53	11.52
17	0.55	1.61	1.59	2.55	3.57	4.55	5.57	6.55	7.55	8.57	9.55	10.57	11.55
18	0.58	1.64	1.62	2.58	3.60	4.58	5.60	6.58	7.58	8.60	9.58	10.60	11.58
19	0.61	1.68	1.66	2.61	3.63	4.61	5.63	6.61	7.61	8.63	9.61	10.63	11.61
20	0.65	1.71	1.69	2.65	3.67	4.65	5.67	6.65	7.65	8.67	9.65	10.67	11.65
21	0.68	1.75	1.72	2.68	3.70	4.68	5.70	6.68	7.68	8.70	9.68	10.70	11.68
22	0.71	1.79	1.76	2.71	3.73	4.71	5.73	6.71	7.71	8.73	9.71	10.73	11.71
23	0.74	1.82	1.79	2.74	3.77	4.74	5.77	6.74	7.74	8.77	9.74	10.77	11.74
24	0.77	1.86	1.83	2.77	3.80	4.77	5.80	6.77	7.77	8.80	9.77	10.80	11.77
25	0.81	1.89	1.86	2.81	3.83	4.81	5.83	6.81	7.81	8.83	9.81	10.83	11.81
26	0.84	1.93	1.90	2.84	3.87	4.84	5.87	6.84	7.84	8.87	9.84	10.87	11.84
27	0.87	1.96	1.95	2.87	3.90	4.87	5.90	6.87	7.87	8.90	9.87	10.90	11.87
28	0.90	2.0	1.97	2.90	3.93	4.90	5.93	6.90	7.90	8.93	9.90	10.93	11.90
29	0.94		2.0	2.94	3.97	4.94	5.97	6.94	7.94	8.97	9.94	10.97	11.94
30	0.97			2.97	4.0	4.97	6.0	6.97	7.97	9.0	9.97	11.0	11.97
31	1.0			3.0		5.0		7.0	8.0		10.0		12.0



# Average Monthly Base Pay Example

Base Pay Rate:	\$2,350.00
Base Pay Frequency:	Biweekly
$2,350 \times 26 = 61,100/12$	
<b>Monthly Base Pay:</b>	<b>\$5,091.67</b>
Total YTD Base Earned:	\$30,000
Pay Date Decimal Calendar Factor:	6.10
$\$30,000/6.10$	
<b>Average Monthly Base Pay:</b>	<b>\$4,918.03</b>



# Knowledge Check One

What is the **pay stub decimal factor** for the paystub below?

- A. 4.68
- B. 6.54
- C. 5.63

CO	FILE	DEPT	CLOCK	VCHR NO	060
WFC	100142	001002		0000210002	2

*Arch Personal Shopping*  
2155 Ft. Worth Way  
Dallas, TX 75201

Taxable Marital Status: Married  
Exemptions/Allowances:  
Federal 3  
State 3

Social Security Number: XXX-XX-2345

### EARNINGS STATEMENT

Period Ending: 06/19/2021  
Pay Date: 06/25/2021

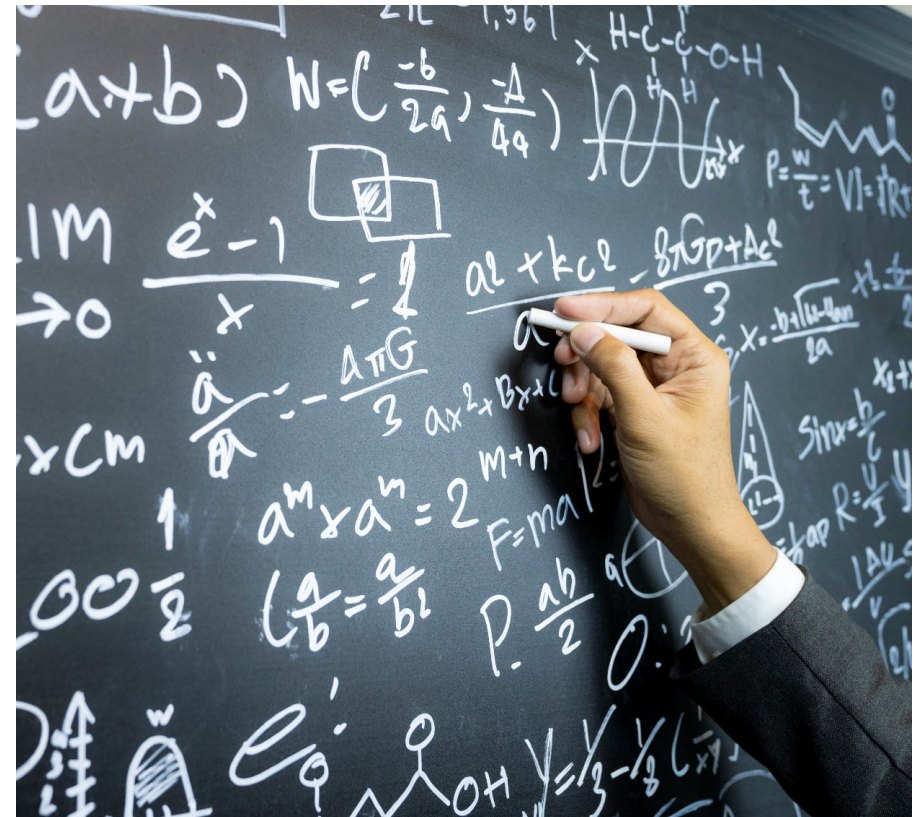
00000000002  
**BRADLEY STOOPER**  
1564 MORTGAGE WAY  
IRVING, TX 75014



## Check Your Understanding One

The correct answer is **C. 5.63**.

1. Using the **Period Ending Date** of 6/19.
2. Five (5) full months have passed.
3. There are 30 days in June.
4.  $19/30 = .63$
5. 5.63 months have passed.



## Part C — Base vs. Average Variance Steps

### Step Five

- Subtract Average Monthly Pay FROM Base Monthly Pay to determine the Difference.



### Step Six

- Divide the Difference by the Base Monthly Pay to determine the Quotient.



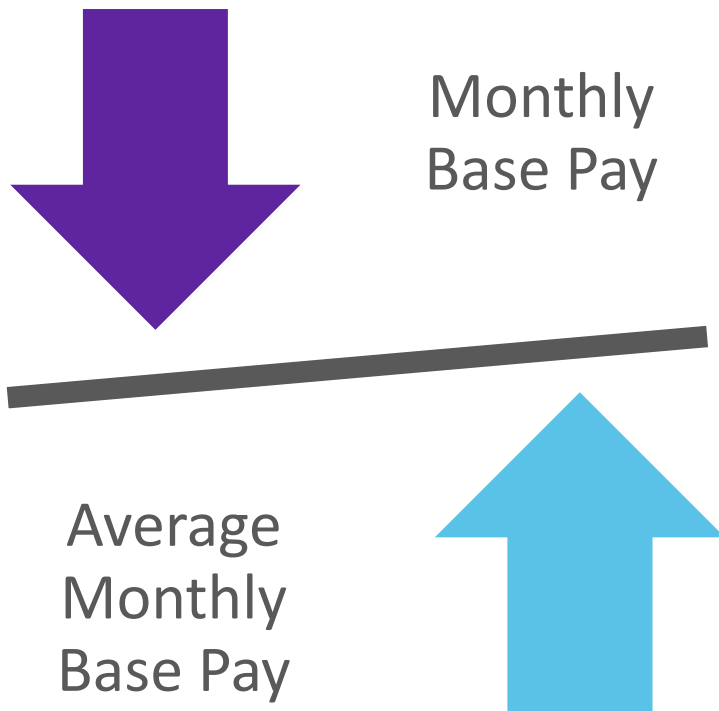
### Step Seven

- Multiply the Quotient by 100 to determine the Variance percentage.

**Base vs.  
Average  
(Variance)**

DIFFERENCE between the BASE and the AVERAGE?

## Part C — Base vs. Average Variance

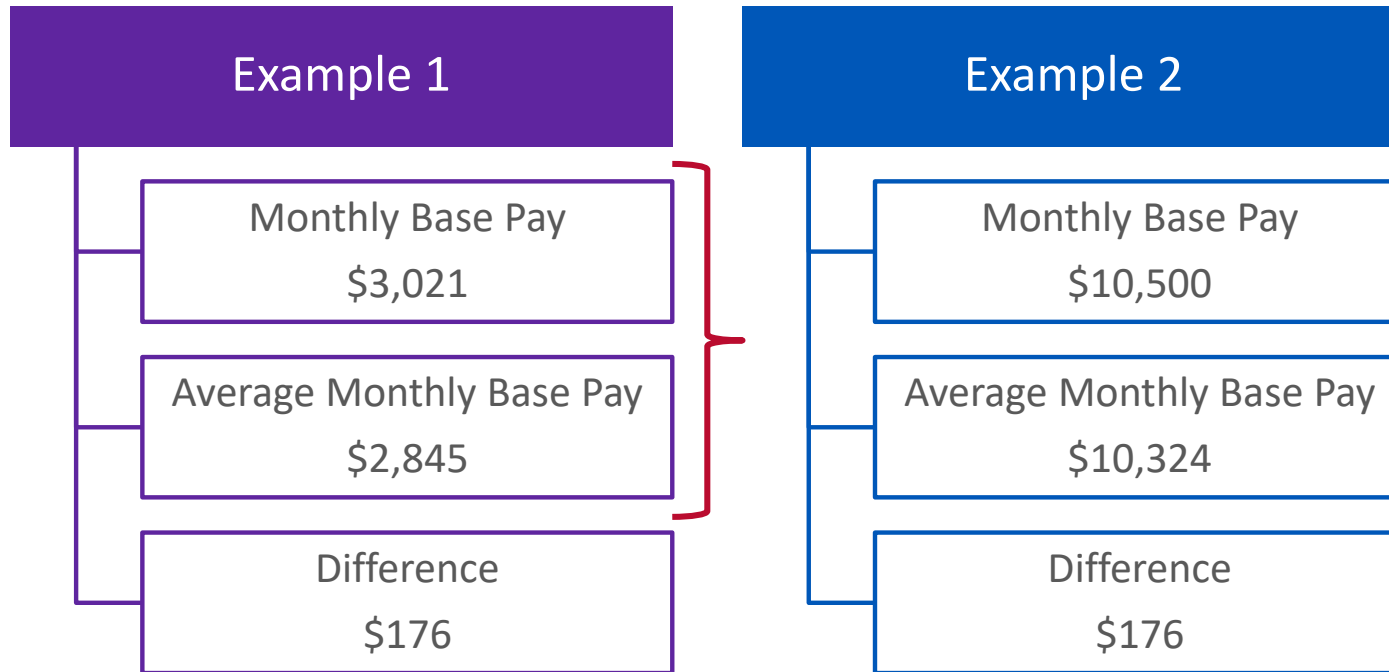


$$\$5,091.67 - \$4,918.03 = \$173.64$$

Is there a  
**SIGNIFICANT**  
difference?

**SIGNIFICANT**  
*is subjective!*

# Significant Difference



\$176 per month is MORE SIGNIFICANT in Example 1 than Example 2 because it is a larger portion of the monthly income.

## Variance:

The fact or quality of being different, divergent or inconsistent.

$$s^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N - 1}$$

# Calculating Variance

## Step Six

- Divide the Difference by the Base Monthly Pay to determine the Quotient.



Monthly Base Pay  
\$3,021

Average Monthly Base Pay  
\$2,845



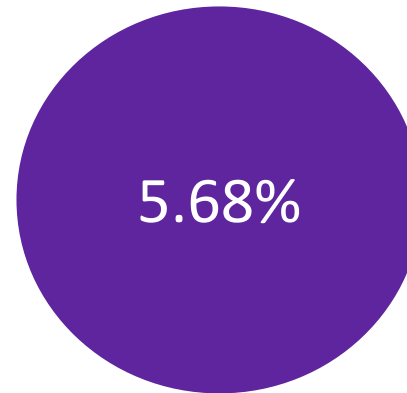
Difference  
\$176

$$176 / 3,021 = 0.0568$$

## Step Seven

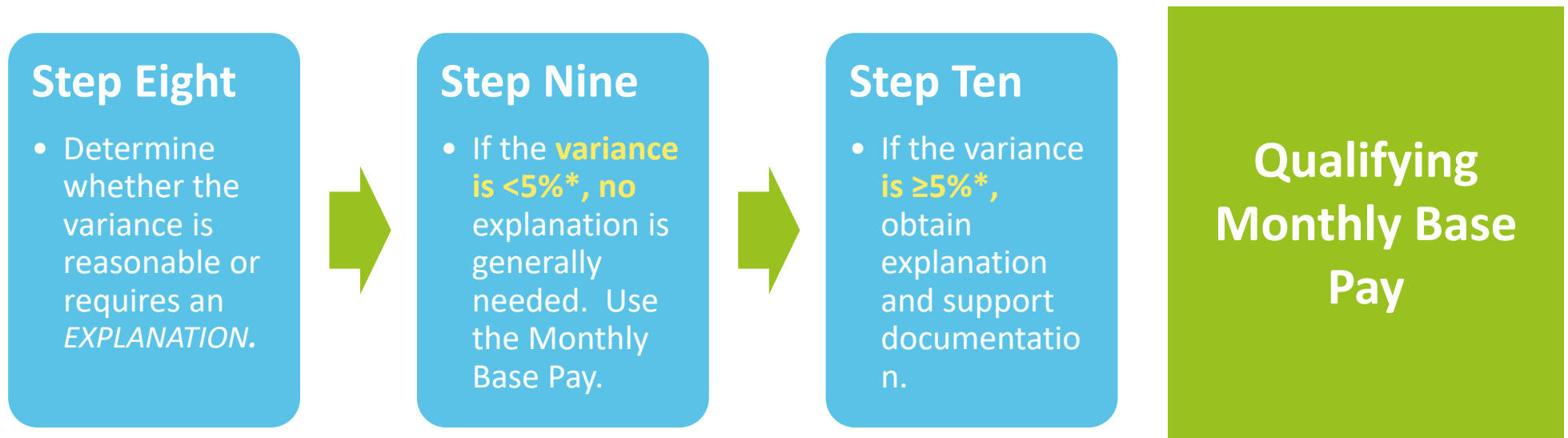
- Multiply the Quotient by 100 to determine the Variance percentage.

$$0.0568 \times 100$$





## Part D — Qualifying Monthly Base Pay



Amount used to QUALIFY the borrower.

\*General guidance — your institution's tolerance may vary.

# Variance Example — Side-by-Side Comparison

<b>E X A M P L E 1</b>	Monthly Base Pay	\$3,021.00	
	Average Monthly Pay	\$2,845.00	
	<b>Difference</b>	$\$3,021.00 - \$2,845.00 =$	<b>\$176.00</b> ←
	<b>Quotient</b>	$\$176.00 / \$3,021.00 =$	<b>0.0568</b>
	<b>Variance Percentage</b>	→ $0.0568 \times 100 =$	<b>5.68%</b>

<b>E X A M P L E 2</b>	Monthly Base Pay	\$10,500.00	
	Average Monthly Pay	\$10,324.00	
	<b>Difference</b>	$\$10,500.00 - \$10,374.00 =$	<b>\$176.00</b> ←
	<b>Quotient</b>	$\$176.00 / \$10,500.00 =$	<b>0.0167</b>
	<b>Variance Percentage</b>	→ $0.0167 \times 100 =$	<b>1.67%</b>

## Rule of Thumb?

There is no Agency (GSE) direction, so, use your judgement. Follow your institution's guidance, if available.\*



<5%

- **Generally**, okay without additional documentation\*.



≥5%

- **Typically** requires explanation and support documentation\*.

\*General guidance — your institution's tolerance may vary. Check your program guidelines.

## Variance Example — Using Guidance

<b>E X A M P L E 1</b>	Monthly Base Pay	\$3,021.00
	Average Monthly Pay	\$2,845.00
	<b>Difference</b>	$\$3,021.00 - \$2,845.00 = \mathbf{\$176.00}$
	<b>Quotient</b>	$\$176.00 / \$3,021.00 = \mathbf{0.0568}$
	<b>Variance Percentage</b>	$0.0568 \times 100 = \mathbf{5.68\%}$

If your internal policy is a 5% tolerance, EXAMPLE 1 would require more information before proceeding.

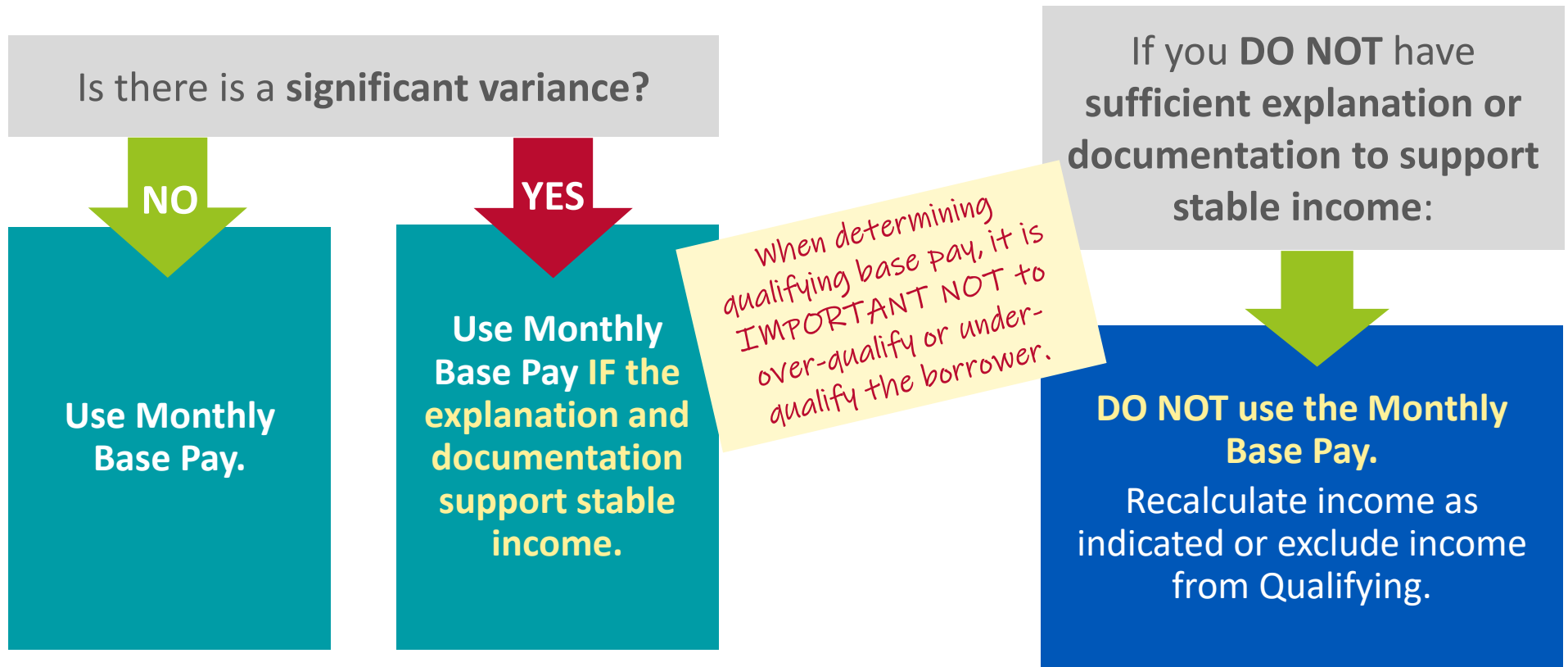
<b>E X A M P L E 2</b>	Monthly Base Pay	\$10,500.00
	Average Monthly Pay	\$10,324.00
	<b>Difference</b>	$\$10,500.00 - \$10,374.00 = \mathbf{\$176.00}$
	<b>Quotient</b>	$\$176.00 / \$10,500.00 = \mathbf{0.0167}$
	<b>Variance Percentage</b>	$0.0167 \times 100 = \mathbf{1.67\%}$

# Acceptable Reasons for Large Variance

- Paid significantly in arrears.
- Unpaid time off.
- Large raise or promotion.



# Qualifying Base Pay

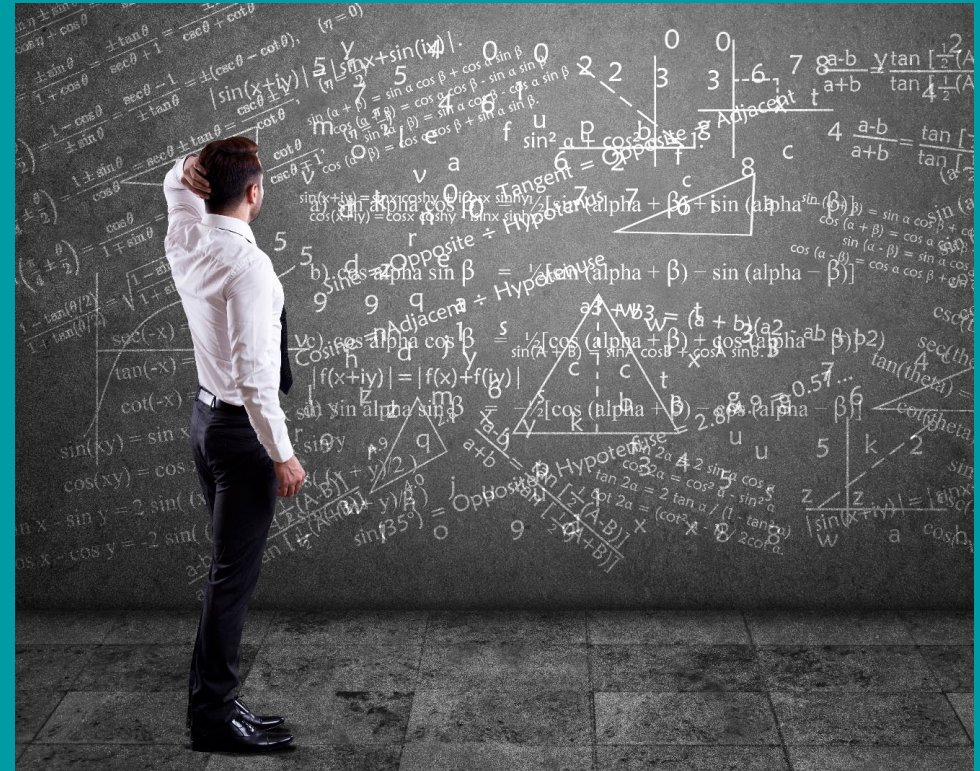


# Why Not Use YTD Average?

If the Average is lower, why not just use that?

Why obtain documentation and explanations for low YTD income?

*It's important to understand the entire picture and know what the normal earnings are (outside of any exceptions).*




# YTD Average Example





# Pulling the Steps Together — Arch MI Qualifying Income Calculator (AMIQuiC)





**Arch MI Qualifying Income Calculator**  
**Totals** 05.18.23

Borrower Name: <b>Bruno Stars</b>	Loan Number: <b>Enter the loan number.</b>
Employer Name: <b>Arch Car Service</b>	Date of Income Analysis: <b>7/15/2023</b>

Monthly Base Income Total	\$5,091.67
Monthly Bonus Income Total	\$0.00
Monthly Overtime Income Total	\$0.00
Monthly Commission Income Total	\$0.00
<b>AMIQuiC Qualifying IncomeTotal</b>	<b>\$5,091.67</b>

[Click here to access the Base Income Calculator.](#)

[Click here to access the Bonus Income Calculator.](#)

[Click here to access the Overtime Income Calculator.](#)

[Click here to access the Commission Income Calculator.](#)





# AMIQuiC Example

Name auto-populates from Totals (Main) tab.

Click checkbox next to Pay Frequency and enter Pay Rate.

Variance Percentage is auto-calculated.

If entering Prior Year Earnings, you can see the historical comparisons.

### Base Income Analysis

**Borrower(s) Name:**  
Bruno Stars Borrower's name will copy from the AMIQuiC Totals Tab.

[Click Here for Base Income Instructions.](#)
[Click Here for AMIQuiC Totals.](#)

Pay Frequency	Pay Rate	Average Hours (Hourly Only)	Base Pay
1 <input type="checkbox"/> Hourly		40	n/a
<input checked="" type="checkbox"/> Biweekly	\$2,350.00	n/a	\$5,091.67
<input type="checkbox"/> Semimonthly		n/a	n/a
<input type="checkbox"/> Monthly		n/a	n/a
<b>2 Current Monthly Base Earnings</b>			<b>\$5,091.67</b>
<b>Year-to-Date (YTD) - 2023</b>		<b>Year to Date</b>	
3 Year-to-Date Paid-Through Date	Enter date through which year-to-date pay was earned (00/00/00).	07/03/21	
4 Pay Date Decimal Calendar Factor	Enter the factor from the Pay Date Decimal Calendar based on the year-to-date paid-through date (above, Line 3). <a href="#">(click here for pay date decimal calendar).</a>	6.1	
5 2023 Year-to-Date Base Earnings	Enter the total amount of year-to-date BASE PAY earned.	\$30,000.00	
<b>6 Average Monthly YTD Base Earnings</b>			<b>\$4,918.03</b>
<b>7 Current Monthly Base Earnings vs. Average Monthly YTD Base Earnings (Line 2 vs. Line 6)</b>		% of variance below base rate 3.41%	% of variance above base rate n/a
<b>Prior Year Base Earnings</b>			
		<b>2021</b>	<b>2022</b>
8 Enter total amount of prior year BASE earnings (as applicable), for example from Written VOE.		\$56,000.00	\$58,000.00
<b>9 Average Monthly Prior Year Base Earnings</b>		<b>\$4,666.67</b>	<b>\$4,833.33</b>

Base Pay is auto-calculated.

Enter Period Ending Date and Pay Date Decimal Factor, along with YTD Base Earnings.

Average Monthly Base Pay is auto-calculated.

# AMIQuiC Example

Choose **Qualifying Income** (Default is Current Base Pay).

An average of any combination of **YTD Average, Most Recent Year** and **Prior Year** can also be utilized.

Monthly Qualifying Income		Choose EITHER Current Base Pay (Line 10) OR indicate 2021, 2022 and/or 2023 YTD (Lines 11, 12 and/or 13).	
10	<b>Use Current Base Pay Rate?</b> Current base pay should be the default — Comment/Explain below if you are NOT using this option	Indicate whether or not you are using the current base rate as qualifying income.	YES
<b>If utilizing anything other than the current base pay rate (Line 10), add supporting comments below after choosing factors to include.</b>			
11	<b>Include 2023 YTD Base Pay?</b> If this option is chosen, Line 10 must indicate "NO."	Indicate "YES" if you wish to include 2023 YTD Average in the calculation.	NO
12	<b>Include 2022 Base Pay?</b> If this option is chosen, Line 10 must indicate "NO."	Indicate "YES" if you wish to include 2022 Average in the calculation.	NO
13	<b>Include 2021 Average Base Pay?</b> If this option is chosen, Line 10 must indicate "NO."	Indicate "YES" if you wish to include 2021 Average in the calculation.	NO
14	<b>Monthly Qualifying Base Income</b>		\$5,091.67
Comments: <div style="border: 1px solid black; height: 40px; width: 100%;"></div>			

**Monthly Qualifying Base Income** is auto-calculated base on your selections.

**Add Comments** as needed to clarify your choice(s).

## Knowledge Check Two

What is the **variance percentage**?

- A. 1.25%
- B. 1.67%
- C. 2.10%

Monthly Base Pay  
\$10,500

Average Monthly Base Pay  
\$10,324

Difference  
\$176



## Check Your Understanding Two

The correct answer is **B. 1.67%**.

- $0.167 \times 100 = 1.67\%$ .

### Part C — Base vs. Average Variance Steps

#### Step Five

- Subtract Average Monthly Pay FROM Base Monthly Pay to determine the Difference.



#### Step Six

- Divide the Difference by the Base Monthly Pay to determine the Quotient.



#### Step Seven

- Multiply the Quotient by 100 to determine the Variance percentage.

**Base vs.  
Average  
(Variance)**

DIFFERENCE between the BASE and the AVERAGE?

# Paystub Income Calculation

## – Variable Pay



# Variable Income

Income that typically fluctuates, such as:

- Overtime.
- Bonus.
- Commission.
- Tips.



# Considerations

- History of receipt.
  - Generally, the income must be received for at least two years.
- Frequency of payment.
  - The income may be received monthly, quarterly, annually or with every pay period.
- Income trending.
  - Stable or increasing.
  - Declined, but stabilized.
  - Continually declining.





Trend of the Income is Stable or Increasing.

- Generally, the income amount can be averaged.
- Special consideration should be taken if there is an extreme increase in year-to-date earnings.

Trend of the Income was Declining, but Since Stabilized.

- Generally, the current, lower amount must be used, if there is no reason to believe the borrower will not continue to be employed at the current level.

Trend of the Income is Continually Declining.

- The income may not be stable.
- Additional analysis must be conducted to determine whether **any** variable income should be used. DO NOT average.

# Income Trending Examples

Trend of the Income is Stable or Increasing.

2021	2022	2023 YTD
\$22,000	\$25,000	\$24,650

Trend of the Income was Declining, but Since Stabilized.

2021	2022	2023 YTD
\$20,000	\$17,500	\$17,985

Trend of the Income is Continually Declining.

2021	2022	2023 YTD
\$25,000	\$18,000	\$13,000

# Outliers



## BONUS TRENDING



# Variable Income and Trending Example — Bonus

	Annual	Average Monthly
Pay Frequency = Biweekly		
2021 Bonus	\$10,000	\$833.33
2022 Bonus	\$12,500	\$1,041.67
2023 Bonus thru 5/20/23 Pay Date Decimal Factor = 12.0	\$19,000	\$1,583.33

Trending of the Income = Stable or Increasing

How do you calculate this borrower's qualifying Bonus?

# Bonus Example

### Bonus Income Analysis

**Borrower(s) Name:**  
Outlier Example Borrower's name will copy from the AMIQuIC Totals Tab.

[Click Here for AMIQuIC Totals.](#)

		Prior Year	Most Recent Year
		2021	2022
<b>Prior Year Bonus Earned</b>			
1	Total Bonus Earned	Enter the total amount of bonus earned.	
		\$10,000.00	\$12,500.00
		<small>% of Decline</small> 0.00%	<small>% of Increase</small> 25.00%
		<small>Prior Year vs. Most Recent Year</small>	
<b>Year-to-Date (YTD)</b>			
		<b>Year to Date - 2023</b>	
2	Bonus Payout Months	Calculator assumes bonus payout is annual — if other than annual, enter the appropriate pro-rata number.	12.00
3	2023 Year-to-Date Bonus	Enter the total amount of year-to-date bonus earned.	\$19,000.00
		<small>% of Decline</small> n/a	<small>% of Increase</small> 52.00%
		<small>Most Recent Year vs. Year-to-Date</small>	
<b>Monthly Qualifying Bonus Income</b>			
4	Include 2021 (Prior Year) data?	Indicate "YES" if you wish to include 2021 data in the calculation.	YES
5	Include 2022 (Most Recent Year) data?	Indicate "YES" if you wish to include 2022 data in the calculation.	YES
6	Include 2023 (Year-to-Date) data?	Indicate "YES" if you wish to include 2023 YTD data in the calculation.	NO
7	<b>Monthly Qualifying Bonus Income</b>		<b>\$937.50</b>

**Comments:**

# Variable Income and Trending Example — Overtime

	Annual	Average Monthly
Pay Frequency = Biweekly		
2021 Overtime	\$14,527.86	\$1,210.65
2022 Overtime	\$15,962.32	\$1,330.19
2023 Overtime thru 5/20/23 Pay Date Decimal Factor = 4.65	\$6,489.72	\$1,395.64

Trending of the Income = Stable or Increasing

How do you calculate this borrower's qualifying Overtime?

# Overtime Example



Overtime Income Analysis			
Borrower(s) Name: Variable Income & Trending <small>Borrower's name will copy from the AMIQuiC Totals Tab.</small>			
		<a href="#">Click Here for AMIQuiC Totals.</a>	
		Prior Year	Most Recent Year
		2021	2022
<b>Prior Year Overtime Earned</b>			
1	Total Overtime Earned	Enter the total amount of overtime earned.	
		\$14,527.86	\$15,962.32
		<u>Prior Year vs. Most Recent Year</u>	
		% of Decline 0.00%	% of Increase 9.87%
		Year to Date	
<b>Year-to-Date (YTD)</b>			
2	Year-to-Date Paid-Through Date	Enter date through which year-to-date pay was earned (00/00/00).	05/20/23
3	Pay Date Decimal Calendar Factor	Enter the factor from the Pay Date Decimal Calendar based on the year-to-date paid-through date (above, Line 3) <a href="#">(click here for the pay date decimal calendar).</a>	4.65
4	2022 Year-to-Date Overtime	Enter the total amount of year-to-date overtime earned.	\$6,489.72
		<u>Most Recent Year vs. Year-to-Date</u>	
		% of Decline 0.00%	% of Increase 4.92%
<b>Monthly Qualifying Overtime Income</b>			
5	Use 2021 (Prior Year) data?	Indicate "YES" if you wish to include 2021 data in the calculation.	YES
6	Use 2022 (Most Recent Year) data?	Indicate "YES" if you wish to include 2022 data in the calculation.	YES
7	Use 2023 (Year-to-Date) data?	Indicate "YES" if you wish to include 2023 YTD data in the calculation.	YES
8	<b>Monthly Qualifying Overtime Income</b>		<b>\$1,290.75</b>



# Variable Income and Trending Example — Commission



	Annual	Average Monthly
Pay Frequency = Semimonthly		
2021 Commission	\$120,000.00	\$10,000.00
2022 Commission	\$130,000.00	\$10,833.33
2023 Commission thru 9/15/23 Pay Date Decimal Factor = <b>8.50</b>	\$135,575.00	\$15,950.00

Trending of the Income = Stable or Increasing

How do you calculate this borrower's Commission?

# Using Outlier vs. Not Using Outlier



Should you include the outlier or not? It depends.

[Click Here for AMIQuiC Totals.](#)

		Prior Year	Most Recent Year
		2021	2022
<b>Prior Year Overtime Earned</b>			
1	Total Commission Earned	\$120,000.00	\$130,000.00
		Prior Year vs. Most Recent Year	% of Decline 0.00%
			% of Increase 8.33%
<b>Year-to-Date (YTD)</b>		Year to Date	
2	Year-to-Date Paid-Through Date	09/15/23	
3	Pay Date Decimal Calendar Factor	8.50	
4	2023 Year-to-Date Commission	\$135,573.00	
		Most Recent Year vs. Year-to-Date	% of Decline 0.00%
			% of Increase 47.23%
<b>Monthly Qualifying Income</b>			
5	Use 2021 (Prior Year) data?	Indicate "YES" if you wish to include 2021 data in the calculation.	YES
6	Use 2022 (Most Recent Year) data?	Indicate "YES" if you wish to include 2022 data in the calculation.	YES
7	Use 2023 (Year-to-Date) data?	Indicate "YES" if you wish to include 2023 Average data in the calculation.	YES
8	Monthly Qualifying Commission Income	\$11,863.78	
<b>Comments:</b>			
Documentation in file shows that borrower's territory was expanded to twice its size in 2023, which supports the use of 2023 commission			

[Click Here for AMIQuiC Totals.](#)

		Prior Year	Most Recent Year
		2021	2022
<b>Prior Year Overtime Earned</b>			
1	Total Commission Earned	\$120,000.00	\$130,000.00
		Prior Year vs. Most Recent Year	% of Decline 0.00%
			% of Increase 8.33%
<b>Year-to-Date (YTD)</b>		Year to Date	
2	Year-to-Date Paid-Through Date	09/15/23	
3	Pay Date Decimal Calendar Factor	8.50	
4	2023 Year-to-Date Commission	\$135,573.00	
		Most Recent Year vs. Year-to-Date	% of Decline 0.00%
			% of Increase 47.23%
<b>Monthly Qualifying Income</b>			
5	Use 2021 (Prior Year) data?	Indicate "YES" if you wish to include 2021 data in the calculation.	YES
6	Use 2022 (Most Recent Year) data?	Indicate "YES" if you wish to include 2022 data in the calculation.	YES
7	Use 2023 (Year-to-Date) data?	Indicate "YES" if you wish to include 2023 Average data in the calculation.	NO
8	Monthly Qualifying Commission Income	\$10,416.67	
<b>Comments:</b>			

1. Do you need maximum income to qualify?
2. Can you get an explanation and documentation to support stability?

## Knowledge Check Three

Is this True or False?

- Considerations when calculating variable income include history of receipt, frequency of the payment and income trending.



## Check Your Understanding Three

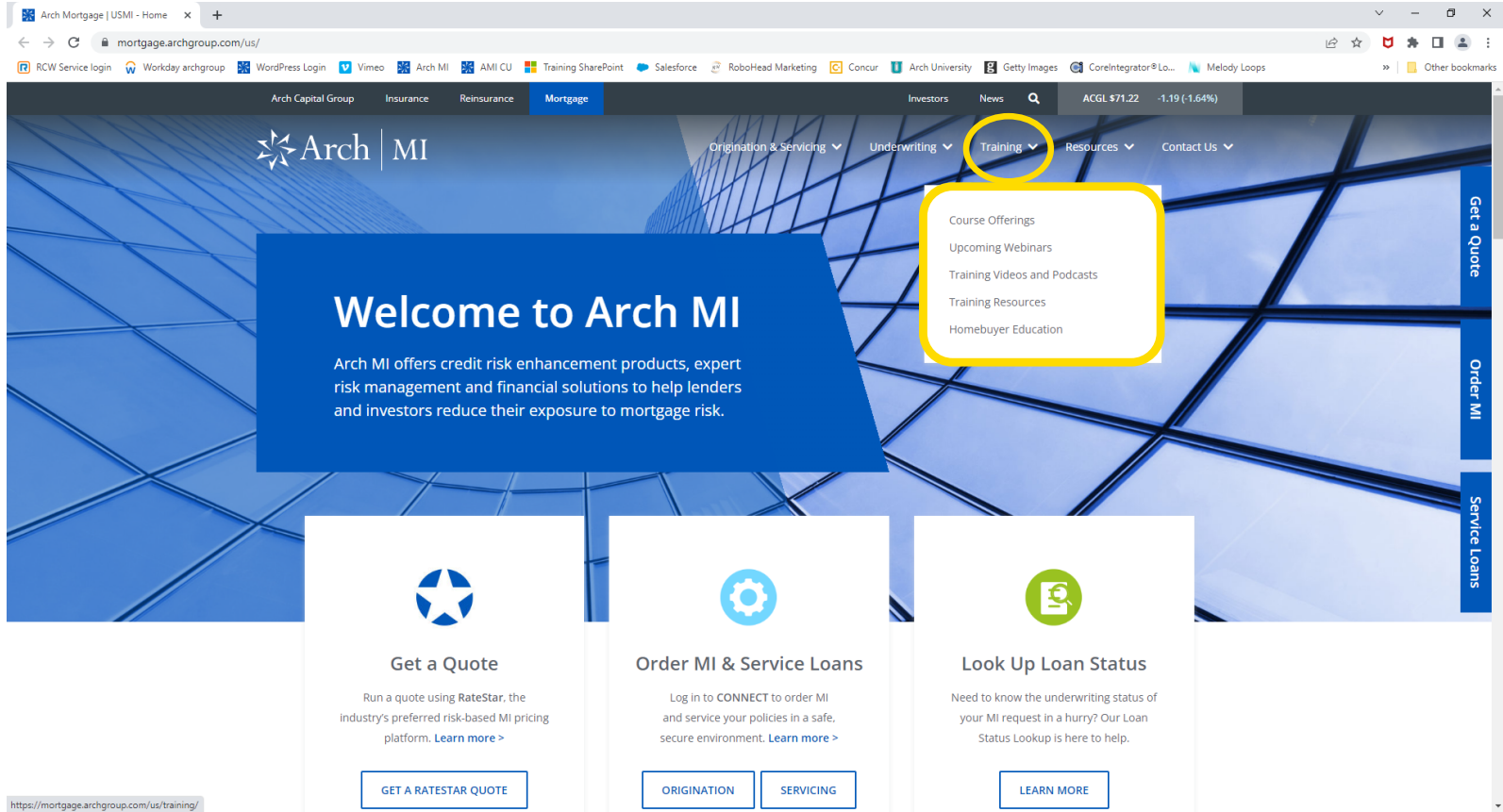
The correct answer is *True*.

- *Considerations when calculating variable income include history of receipt, frequency of the payment and how the income has trended over the period of time you are reviewing.*



# Tools and Resources





The screenshot shows the Arch MI website interface. The navigation bar includes 'Arch Capital Group', 'Insurance', 'Reinsurance', 'Mortgage', 'Investors', and 'News'. A 'Training' dropdown menu is open, listing: 'Course Offerings', 'Upcoming Webinars', 'Training Videos and Podcasts', 'Training Resources', and 'Homebuyer Education'. The main content area features a 'Welcome to Arch MI' banner with a description of credit risk enhancement products. Below the banner are three service cards: 'Get a Quote' (using RateStar), 'Order MI & Service Loans' (using CONNECT), and 'Look Up Loan Status' (Loan Status Lookup). A vertical sidebar on the right contains 'Get a Quote', 'Order MI', and 'Service Loans' buttons.

<https://mortgage.archgroup.com/us/training/>



# THANK YOU

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