

Illustrations of Assistance Payments Computations (Section 235)

1. Assume a 30-year, \$15,000 mortgage insured prior to January 5, 1976 with interest at eight and one-half percent and insured under Section 235(i). The payment to principal and interest under the mortgage is \$115.35. The lender requires monthly escrow deposits for MIP, taxes, and hazard insurance premiums of \$6.23, \$15.25, and \$3.09, respectively. The mortgagor has not purchased homeowner's insurance and has insured the property against fire and extended coverage only. The total family income is \$6,200 per year, which includes annual wages of \$4,500 and a Veteran Administration pension of \$1,500 and overtime pay of \$200, which was earned last year but not the year before that, and the employer's verification is silent on the question of whether it will or will not continue. There are two minor children in addition to the homeowner and his spouse. The assistance payments are computed as follows:

(a) Formula One.

Income:	Annual wages		\$4,500.00
	VA pension		
1,500.00			
<hr style="width: 100px; margin-left: 0;"/>			
	Total Family Income		\$6,000.00
			(The overtime pay is not included)
Less:	5% of \$6,000	\$300.00	
	Minors (2 x \$300)	600.00	900.00
<hr style="width: 100px; margin-left: 0;"/>			
	Adjusted annual income		\$5,100.00
	Adjusted monthly income		425.00
	Monthly mortgage payment: P&I		\$ 115.35
6.23			MIP
15.25			Taxes
3.09			Hazard Insurance
<hr style="width: 100px; margin-left: 0;"/>			

\$ 139.92

Less: 20X of \$425

85.00

	Formula One Assistance Payment	\$ 54.92
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(b)Formula Two.

(1)Complete Calculations.

	Monthly payment to P&I at 8 1/2%	\$ 115.35
	MIP	

6.23

\$ 121.58

Less: Monthly payments to
P&I at 1%

48.30

	(\$3.22 per \$1,000)	=====
	Formula Two assistance payment	

73.28

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(2) Factor Method.

	4.8853 x 15 = Formula Two assistance	\$73.28
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In computing the assistance payment under either formula, slight differences may occur because of rounding. The mortgagee may round any figure to the nearest dollar at each stage in the computations, or it may use exact amounts throughout. The method must be consistent, however. If rounding is employed to compute the Formula One assistance payment, figures must be rounded at the same point in computing the Formula Two assistance payment. Slight differences may be encountered if Formula Two assistance payments computed complete calculation method are compared with those computed in the same case using the factor method. These differences are created by differences in rounding factors and maybe disregarded. In this example, the mortgagee will bill HUD for \$54.92 monthly, the lesser

of the two assistance payments. For illustration, both methods for computing the Formula Two assistance payment have been shown. If the factor method is used, the calculations should not be entered on Form HUD-93101.

2. Assume a 30-year, \$15,000 mortgage insured on or after January 5, 1976 with interest at eight and one-half percent and insured under Section 235(i). The payment to principal and interest under the mortgage is \$115.35. The lender requires monthly escrow deposits for MIP, taxes, And hazard

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insurance premiums of \$8.72, \$15.25, and \$3.09, respectively. The mortgagor has not purchased homeowner's insurance and has insured the property against fire and extended coverage only. Total family income is \$6,200 per year which includes annual wages of \$4,500 and a Veterans Administration pension of \$1,500, and overtime pay of \$200, which was earned last year but not the year before that, and the employer's verification is silent on the question of whether it will or will continue. There are two minor children in addition to homeowner and his spouse. The assistance payments are computed as follows:

(a) Formula One

Income: Annual Wages	\$4,500.00
VA pension	1,500.00

Total Family Income	\$6,000.00
(The overtime pay is not included)	

Less: 5% of \$6,000	\$300.00	
Minors (2 x \$300)	600.00	900.00

Adjusted annual income	\$5,100.00
Adjusted monthly income	425.00

Monthly mortgage payment: P&I	\$115.35
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MIP

8.72

15.25		Taxes
	Hazard Insurance	3.09
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142.41		
	Less: 20% of \$425	85.00
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	Formula One Assistance Payment	\$ 57.41
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(b)Formula Two:

(1)Complete Calculations.

8.72	Monthly payment to P&I at 8 1/2%	\$115.35
	7/10 of 1% MIP	
<hr/>		
\$124.07		
	Less: Monthly payments to	
	P&I at 5%	80.55
	(\$5.37 per \$1,000)	=====
	Formula Two assistance	
	payment	
43.52		
=====		

(2)Factor Method.

	2.9013 x 15	43.52
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In computing the assistance payment under either formula, slight differences may occur because of rounding. The mortgagee may round any figure to the nearest dollar at each stage in computations, or it may use exact amounts

throughout. The method must be consistent, however. If rounding is employed to compute the Formula One assistance payment, figures must be rounded at the same point in computing the Formula Two assistance payments. Slight differences may be encountered if Formula Two assistance payments computed by the complete calculation method are compared with those computed in the same case using the factor method. These differences are created by the difference in rounding factors and may be disregarded. In this case, the mortgagee will bill HUD for \$43.52 monthly, the lesser of the two assistance payments. For illustration, both methods for computing the Formula Two assistance payment have been shown. If the factor method is used, the calculation should not be entered on Form HUD-93101.

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(b)Formula Two:

(1)Complete Calculations.

	Monthly payment to P&I at 8 1/2%	\$115.35
	7/10 of 1% MIP	
8.72		
<hr/>		
\$124.07		
	Less: Monthly payments to	
	P&I at 5%	80.55
	(\$5.37 per \$1,000)	=====
	Formula Two assistance	
	payment	
43.52		
=====		

(2)Factor Method.

	2.9013 x 15	43.52
=====		

In computing the assistance payment under either formula, slight differences may occur because of rounding. The mortgagee may round any figure to the nearest dollar at each stage in computations, or it may use exact amounts

throughout. The method must be consistent, however. If rounding is employed to compute the Formula One assistance payment, figures must be rounded at the same point in computing the Formula Two assistance payments. Slight differences may be encountered if Formula Two assistance payments computed by the complete calculation method are compared with those computed in the same case using the factor method. These differences are created by the difference in rounding factors and may be disregarded. In this case, the mortgagee will bill HUD for \$43.52 monthly, the lesser of the two assistance payments. For illustration, both methods for computing the Formula Two assistance payment have been shown. If the factor method is used, the calculation should not be entered on Form HUD-93101.

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3. The following assistance calculations are based on the Section 235 Revised/Recapture/10 Program:

Assume a 30-year, \$20,000 mortgage insured on March 9, 1984 at fourteen and one-half percent. The payment to principal and interest under the mortgage is \$244.92. The lender requires monthly escrow deposits for MIP, taxes and hazard insurance premiums of \$11.65, \$15.25, \$3.09 respectively. The total family income is \$6,000 per year, which includes annual wages of \$4,500 and a Veterans Administration pension of \$1,500. There are two minor children in addition to the homeowner and his spouse. The assistance payments are computed as follows:

a. Formula One.

Income: Annual Wages		\$4,500.00	
VA Pension			1,500.00
<hr/>			
Total Family Income		\$6,000.00	
Less 5% of \$6,000	\$300.00		
Minors (2x \$300)	600.00		900.00
Adjusted annual income		<hr/>	<hr/>
		\$5,100.00	
Adjusted monthly income			\$ 425.00

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Monthly Mortgage Payment:	P&I	244.92
	MIP	11.65
	Taxes	15.25

Hazard Insurance 3.09

\$274.91

Less: 28% of \$425 119.00

Formal One Assistance Payment \$155.91

b. Formal Two.

1) Complete Calculations.

Monthly Payment to P&I at 14.50% \$244.92
MIP

11.65

\$256.57

Less: Monthly Payments to
P&I at 5.50%
(\$5.68 per \$1,000) 113.60

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Formal Two Assistance \$142.97

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2) Factor Method

7.1528 x \$20,000 \$143.00

In computing the assistance payment under either formula, slight differences may occur because of rounding. The mortgagee may round any figure to the nearest dollar at each stage in the computations, or it may use exact amounts throughout. The method must be consistent, however. If rounding is employed to compute the Formula One assistance payment, figures must be rounded at the same point in computing the Formula Two assistance payment. Slight differences may be encountered if Formula Two assistance payments computed by the complete calculation method are compared with those computed in the same case using the factor method. These differences are created by differences in rounding factors and may be disregarded. In this example, the mortgagee will bill HUD for \$143 monthly, the lesser of the two assistance payments. For illustration, both methods for computing the Formula Two assistance payment have been shown. If the factor method is used, the calculation should not be entered on the Form HUD 93101.

(3)Initial Partial Payments, Mortgages Insured prior to January 5, 1976.

In the examples below assume the same eight and one-half percent, \$15,000, 30-year mortgage insured prior to January 5, 1976 and the same mortgagor used in the examples of assistance payments computations in paragraph 1. Add the assumptions that the proceeds of the mortgage were fully disbursed and the term of the assistance payments contract began on January 6, with the first regular monthly payment under the mortgage due on March 1. The assistance payment due March 1 would be computed in accordance with the instructions in paragraph 1. An assistance payment would also be due February 1, however, computed as described below.

(a)Interest Collected at Closing. In this situation, interest from January 6 through January 31 is collected at closing, and no additional payment required from the mortgagor until the first monthly payment on March 1. The assistance payment due February 1 is computed as follows:

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(1)Formula One.

Principal	\$.00	
Interest (25 days)		88.54
Taxes		.00
Insurance		
.00		
MIP		
.00		
<hr/>		\$
88.54		
Less: 20% of mortgagor's adjusted income for 25 days (\$425/mo divided by 30 x 25 x 20%)		
		\$
70.85		
Formula One assistance payment		
	\$ 17.69	

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(b) (2) Formula Two.

Payment to P&I at 8 1/2%

	(no principal due)	\$ 88.54	
.00	MIP		
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88.54			\$
	Less: * P&I at 1% for 25 days		
	(no principal due)	\$ 10.42	
	Formula Two assistance		
	payment	\$ 78.12	

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(*\$15,000 x .01 divided by 12 divided by
30 x 25 = \$10.42)

(The factor method may not be used to determine the amount of the Formula Two assistance payment based on a partial payment of interest only.)

In this example, the lesser of the two assistance payments is that computed under Formula One, \$17.69. The mortgagee may bill for this amount on February 1, but is not required to do so. The mortgagee is also entitled to a handling charge for February 1, whether or not it chooses to bill for

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assistance. In this example, the mortgagee has the option of billing for the partial assistance payment so long as it is less than \$85.00, which represents the mortgagor's share of the first regular mortgage payment. The mortgagee will normally have this option if it routinely collects interest at closing.

(b)Adjusted Mortgage Payment. In this situation, interest from January 6 through January 31 is collected as a part of a payment due on February which includes full installments to principal and escrows but a reduced payment to interest. The assistance payment must be billed and is computed as follows:

(1)Formula One.

Principal	\$ 9.10	
Interest (25 days)		88.54

6.23	MIP	
	Taxes	15.25
3.09	Hazard Insurance	

	Payment due February 1	\$122.21
	Less: 20% of mortgagor's adjusted income for 25 days (\$425/mo divided by 30 x 25 x 20%)	\$ 70.85
	Formula One assistance payment	\$ 51.36

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(2)Formula Two.

	Payment to P&I at 8 1/2%	\$ 97.64
	(Principal = \$9.10 Interest for 25 days - \$88.54)	
	MIP	

6.23

\$103.87

	*P&I at 1% for 25 days	46.22
	Formula Two assistance payment	\$ 57.65

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*Computed as follows:
 $\$3.22 \times 15 = \$48.30 = \text{P\&I for one month at 1\%}$
 $\$15,000 \times .01 \text{ divided by } 12 =$
 $\$12.50 = \text{Interest for one month at 1\%}$
 $\$48.30 - \$12.50 = \$35.80 =$
 $\text{Principal for one month at 1\%}$
 $\$12.50 \text{ divided by } 30 \times 25 =$
 $\$10.42 = \text{Interest for 25 days at 1\%}$
 $\$35.80 + \$10.42 = \$46.22$

In this case, the lesser of the two assistance payments is that

computed under Formula One, \$51.36. The payment due February 1 includes \$51.36 in assistance and a mortgagor payment of \$70.85, for a total of \$122.21. Subsequent payments, beginning March 1, will include assistance of \$54.92 and mortgagor payments of \$85.00, as established by the computations described in paragraph 1.

Examples:

I. Assume a \$15,000, 8 1/2% mortgage with a 15-year term.

(a) Market rate calculation:

Principal and Interest (Page 7, 2025 Supplement)	\$ 9.85
Annual MIP (1st year) Page 14, 2025 Supplement)	\$ 4.922
Annual MIP divided by 12 ((\$9.22 divided by 12)	.410

\$10.26

(b) Principal and Interest at 1% -5.99

(c) Formula Two assistance payment _____
per \$1,000 face amount: \$ 4.27

(d) Monthly Formula Two assistance
payment

\$64.05

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(2) Assume a \$22,000, 7% mortgage with a 22-year term, in the fourth year.

(a) Market Rate Calculation:

Principal and Interest (Page 7, 2025)	\$ 7.44	
Annual MIP	25 yrs = 4.710	
		20 yrs =

4.549

.161

Average annual increment (.161 divided by 5) =	.0322
Average annual increment x 2 =	.0644
20-year factor + (annual increment x 2) =	4.6134
Annual MIP - 12 (4.6134 divided by 12):	.3845
Principal and Interest, and MIP at Market Rate:	<u>\$7.8245</u>

(b) Principal and Interest at 1% 4.23

(c) Formula Two assistance payment
per \$1,000 \$3.59

(d) Monthly Formula Two assistance
payment: \$78.98

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(4) Initial Partial Payments, Mortgages Insured On or After January 5, 1976.

In the examples below, assume the same eight and one-half percent, \$15,000, 30-year mortgage insured on or after January 5, 1976 and the same mortgagor used in the examples of assistance payments computations in paragraph 1. Add the assumptions that the proceeds of the mortgage were fully disbursed and the term of the assistance payments contract began on January 6, with the first regular monthly payment under the mortgage due on March 1. The assistance payment due March 1 would be computed in accordance with the instructions in paragraph 1. An assistance payment would also be due February 1, however, computed as described below.

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(a) Interest Collected at Closing. In this situation, interest from January 8 through January 31 is collected at closing, and no additional payment is required from the mortgagor until the first regular monthly payment on March 1. The assistance payment due February 1 is computed as follows:

(1) Formula One.

Principal	\$.00	
Interest (25 days)		88.54

	Taxes	
.00		
	Insurance	
.00		
	MIP	
.00		

\$ 88.54

Less: 20% of mortgagor's adjusted
income for 25 days (\$425/mo divided
by 30 x 25 x 20%) \$ 70.85
Formula One assistance payment \$ 17.69

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(2)Formula Two.

	Payment to P&I at 8 1/2% (no principal due)	\$ 88.54
	MIP	
.00		

\$ 88.54

Less: *P&I at 5% for 25 days
(no principal due)

52.00

Formula Two assistance payment	\$ 36.54
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(*\$15,000 x .05 divided by
12 divided by 30 x 25 = \$52.00)

(The factor method may not be used to determine the amount
of the Formula Two assistance payment based on a partial
payment of interest only.)

In this example, the lesser of the two assistance payments
is that computed under Formula One,

\$17.69. The mortgagee may bill for this amount on February 1, but is not required to do so. The mortgagee is also entitled to a handling charge for February 1, whether or not it chooses to bill for assistance. In this example, the mortgagee has the option of billing for the partial assistance payment so long as it is less than \$85.00, which represents the mortgagor's share of the first regular mortgage payment. The mortgagee will normally have this option if it routinely collects interest at closing.

(b)Adjusted Mortgage Payment. In this situation, interest from January 6 though January 31 is collected as a part of a payment due on February 1, which includes full installments to principal and escrows but a reduced payment to interest. The assistance payment must be billed and is computed as follows:

(1)Formula One.

	Principal	\$ 9.10	
	Interest (25 days)		88.54
8.72	MIP		
	Taxes		15.25
3.09	Hazard Insurance		
<hr/>			
	Payment due February 1	\$124.70	
	Less: 20% of mortgagor's adjusted income for 25 days (\$425/mo divided by 30 x 25 x 20%)		\$ 70.85
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	Formula One assistance payment	\$ 53.85	
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(2)Formula Two.

	Payment to P&I at 8 1/2%	\$ 97.64	
	(Principal = \$9.10		
	Interest for 25 days = \$88.54		
8.72	MIP		
<hr/>			
	Total		
\$106.96			
	* P&I at 5% for 25 days	70.05	
	Formula Two assistance payment		
36.31			
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Computed as follows:

$5.37 \times 15 = \$80.55 = \text{P\&I for}$
 one month at 5\%
 $\$15,000 \times .05 \text{ divided by } 12 =$
 $\$62.50 = \text{Interest for one}$
 month at 5\%
 $\$80.55 - \$62.50 = \$18.05 =$
 $\text{Principal for one month at 5\%}$
 $\$62.50 \text{ divided by } 30 \times 25 =$
 $\$52.00 = \text{Interest for 25 days}$
 at 5\%
 $\$18.05 + \$52.00 = \$70.05$

In this case, the lesser of the two assistance payments is that computed under Formula Two, \$36.31. The payment due February 1 will include \$36.31 in assistance and a mortgagor payment of \$70.05, for a total of \$106.36. Subsequent payments, beginning March 1, will include assistance of \$43.52 and mortgagor payments of \$80.55, as established by the computations described in paragraph 1.

Following are tables designed to assist the mortgagee in computing the Formula Two assistance payment under Section 235(b) for mortgages with interest rates from 7% through 8 1/2% at 1/4% intervals, and with terms of from 20 through 40 years at five-year intervals. Mortgagees may develop their own factors for application to mortgages having different interest rates or terms, and for amortization year after the tenth.

The Formula Two assistance payment is the difference between the payment to principal, interest, and Mortgage Insurance Premium required by the actual mortgage and the payment to principal and interest which the mortgagor would be obligated to pay if the mortgage bore interest at one percent, if the mortgage was insured prior to January 5, 1976, or at five percent if the mortgage was insured on or after January 5, 1976. A factor can then be derived for application to a mortgage of any face amount, interest rate, and term by establishing the Formula Two assistants payment for a \$1,000 mortgage. Factors for each element of the assistance payment computation are included in Form 2025, Amortization, Insurance Premium, and Outstanding Principal Balance Tables, with its supplement.

Examples:

(1) Assume a \$15,000, 8 1/2% mortgage with a 15-year term.

(a) Market rate calculation:

Principal and Interest (Page 7,
2025 Supplement) \$ 9.85

Annual MIP (1st year)
(2025 Supplement) \$4.922 x *\$1.40 6.890

Annual MIP divided by 12
(6.890 divided by 12)

.574

10.42

(b) Principal and Interest at 5%
(Page 9, 2025)

-7.91

(c) Formula Two assistance payment
per \$1,000 face amount: 2.51

(d) Monthly Formula Two assistance
payment:

37.65

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(2) Assume a \$22,000, 7% mortgage with a 22-year term,
in the fourth year.

(a) Market Rate Calculation:

Principal and Interest (Page 7,
2025 Supplement)

7.44

Annual MIP (Page 25, 2025)

25 years = **6.594

20 years = **6.369

.225

Average annual increment
(.225 divided by 5) = .045

Average annual increment x 2 = .090
 20-year factor + (annual
 increment x 2) = 6.459

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Annual MIP divided by 12 (6.659 divided by 12):	.5380
Principal, Interest, and MIP at Market Rate:	\$ 7.9780
(b) Principal and Interest at 5% (Page 7, 2025 Supplement)	- 6.26
(c) Formula Two assistance payment per \$1,000	\$ 1.72
(d) Monthly Formula Two assistance payment	\$ 37.84

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*The rate the MIP factor must be increased
to equal 7/10%

**Reflects the calculation to increase MIP factor
to 7/10%