

State of Arkansas

# Department of Finance and Administration



## Withholding Tax

Formula Method

Effective 03/01/2020

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## FORMULA METHOD

Employers having electronic systems are authorized to use the following formula to compute the amount of withholding rather than use the withholding tables.

1. Multiply the Period Gross Pay by the number of pay periods per year to arrive at the annual gross pay.

**Monthly Gross Pay**            X 12 = Annual Gross Pay  
**Semi-Monthly Gross Pay** X 24 = Annual Gross Pay  
**Bi-Weekly Gross Pay**        X 26 = Annual Gross Pay  
**Weekly Gross Pay**            X 52 = Annual Gross Pay  
**Daily Gross Pay**              X 260 = Annual Gross Pay  
**(Daily is based on a 5 day work week)**

2. Subtract the Standard Deduction of \$ 2,200 to arrive at Net Taxable Income. If Net Taxable Income is below \$87,001, look up the income at the \$50 range (midrange of \$100). For \$87,001 and over, use the exact dollar figure.
3. Compute the Annual Gross Tax on the Net Taxable Income using the bracket below and round that result.

<b>2020 Indexed Tax Brackets</b>			
<b>Over</b>	<b>But Not Over</b>	<b>Percentage</b>	<b>Minus Adjustment</b>
\$0	\$4,599	0.0%	\$0.00
\$4,600	\$9,099	2.00%	\$91.98
\$9,100	\$13,699	3.00%	\$182.97
\$13,700	\$22,599	3.40%	\$237.77
\$22,600	\$37,899	5.00%	\$421.46
\$37,900	\$80,800	5.90%	\$762.55
\$80,801	\$81,800	6.60%	\$1,243.40
\$81,801	\$82,800	6.60%	\$1,143.40
\$82,801	\$84,100	6.60%	\$1,043.40
\$84,101	\$85,200	6.60%	\$943.40
\$85,201	\$86,200	6.60%	\$843.40
\$86,201	and above	6.60%	\$803.40

4. Multiply the total number of Withholding Exemptions claimed on Form AR4EC by \$26.00 to arrive at the total amount of Annual Personal Tax Credits allowed.
5. Subtract the Annual Personal Credits from the Annual Gross Tax computed to arrive at the Annual Net Tax that will be owed.
6. Divide the Annual Net Tax by the number of Pay Periods in the year to arrive at the proper state withholding amount.

## EXAMPLE

### Computer Formula

Gary works for a company and is paid on a monthly basis. He earns \$2,127 per pay period. He has claimed 2 exemptions on his AR4EC.

#### 1. Compute the Annual Gross Pay

Multiply the pay by the number of pay periods.

$$\begin{array}{rcl} \text{Monthly Pay} & = & \$ 2,127.00 \\ \text{Number of Monthly Pay Periods} & = & \underline{\quad \times \quad 12} \\ \text{Annual Gross Pay} & = & \$ 25,524.00 \end{array}$$

#### 2. Subtract Standard Deduction

$$\begin{array}{rcl} \text{Annual Gross Pay} & = & \$ 25,524.00 \\ \text{Less Standard Deduction} & = & \underline{\quad - \quad 2,200.00} \\ \text{Net Taxable Income} & = & \$ 23,324.00 \end{array}$$

#### 3. \$50 Midrange Income Lookup

Since the Net Taxable Income is less than \$87,001, we will take the income to the \$50 midrange of \$23,350.00.

Calculation:

$$\begin{array}{l} \text{Net Taxable Income } \$23,324.00 \\ \text{Lowest number of Midrange } \$23,300.00 \\ \text{Highest number of Midrange } \$23,400.00 \\ (\$23,300.00 + \$23,400.00) \text{ divide by } 2 = \$23,350 \text{ Midrange Value} \end{array}$$

#### 4. Compute the Annual Gross Tax

The annual Net Taxable Income of \$23,350.00 fits in the 5.0% Tax Bracket since it is over \$22,600.00 but less than \$37,899.00. The tax computation will be \$23,350.00 multiplied by 5.0% and then \$421.46 will be subtracted from that product.

$$\begin{array}{rcl} \text{Net Taxable Income} & = & \$ 23,350.00 \\ \text{Multiply by 5.0\% (.050)} & = & \underline{\quad \times \quad 5.0\%} \\ & = & \$ 1,167.50 \\ \text{Less bracket adjustment amount} & = & \underline{\quad - \quad 421.46} \\ \text{Annual Gross Tax} & = & \$746.04 \text{ (Rounded to 746.00)} \end{array}$$

#### 5. Compute the Annual Net Tax

Figure the amount of Annual Personal Credits by multiplying the number of exemptions listed on the employee's AR4EC by \$26.00. This amount will be subtracted from the Annual Gross Tax.

$$\begin{array}{rcl} \text{Annual Gross Tax} & = & \$ 746.00 \\ \text{Less Personal Credit (2 X \$26)} & = & \underline{\quad - \quad 52.00} \\ \text{Annual Net Tax} & = & \$ 694.00 \end{array}$$

#### 6. Compute the State Withholding per Pay Period

$$\begin{array}{rcl} \text{Annual Net Tax} & = & \$ 694.00 \\ \text{Divided by Number of Pay Periods} & = & \underline{\quad \div \quad 12} \\ \text{State Withholding Amount} & = & \$ 57.83 \end{array}$$