

# Spousal Support Present Value ("Buyout")

This report shows the present value of Spousal Support for George J Jones and Marianne P Jones.

Spousal Support is: \$13,428 per year, from 1/2011 through 12/2015.  
Then \$500 per year through 12/2018.

## Result:

The present value of Spousal Support (after-tax) is . . . . . \$ 24,542 to George.  
The present value of Spousal Support (after-tax) is . . . . . \$ 26,208 to Marianne.

## Assumptions:

The calculation is based on the following assumptions

1. Pre-tax interest rates (rates of return) on investment.

5.00 Pre-tax rate of return for George.  
5.00 Pre-tax rate of return for Marianne.

2. Marginal tax rates.

Marginal federal 28.00 and state 10.23 tax rates for George.  
Marginal federal 25.00 and state 8.80 tax rates for Marianne.

## Explanation:

The buyout amount is calculated as follows:

1. Calculate Monthly Discount Rate, as follows:

- For example, suppose the pre-tax rate of return is 4%; the Fed tax rate is 28%; and the state tax rate is 5%.
  - a. The combined state and federal tax rate would be 28% + 5% = 33%
  - b. The annual after-tax value of every \$1 of income would be \$1 - 33 cents = 67 cents.
  - c. The annual after-tax value of a 4% return on \$1 of pre-tax income would be 0.04 \* 0.67 = 2.68% return.
  - d. To get the monthly equivalent of this rate, we divide by 12. So: 2.68% / 12 = 0.002233.
  - e. The monthly after-tax discount factor would be  $1/(1+r) = 1/(1+0.002233) = 0.997772$ .

Plugging the actual numbers into this approach, we get:

0.9974 Monthly after-tax discount factor for George.  
0.9972 Monthly after-tax discount factor for Marianne.

2. Apply the discount factors to each month's payment to get present value.

Present Value of n'th month payment = Monthly payment \* (Monthly Discount Factor)<sup>n</sup>.  
Add the monthly present values of each month together to get a year's present value.

	George			Marianne		
Year	Annual Payment	After-tax Value	Present Value	After-tax Value	Present Value	
2013	13,428	8,294	8,157	8,889	8,732	
2014	13,428	8,294	7,910	8,889	8,448	
2015	13,428	8,294	7,669	8,889	8,173	
2016	500	309	277	331	294	
2017	500	309	268	331	285	
2018	500	309	260	331	276	

TOTALS: 41,784 25,810 24,542 27,661 26,208