

**Question:** I have a year value represented as a decimal (e.g. 3.667 years). How do I change it to represent years and months?

**Answer:** By using a combination of INT functions and concatenations

**Process (Excel 2003 and 2007):**

	A	B	C	D
1	Amount	Yearly Amount		Years To Repay
2	20,000	3,500		5.714285714
3				
4				Years To Repay
5				
6				
7				

In the example above, a loan of R 20,000 is to be repaid with a yearly repayment amount of R 3,500 required. To know how many years it would take to pay back, simply divide R 20,000 (A1) by R 3,500 (B1) for an answer of 5.714285714 years. How could we convert that to an answer that is represented as years and months, which would be more meaningful? The following steps will use the layout represented above:

1. Select cell D5
2. In cell D5, type =INT(D2) and press *Enter*.

	A	B	C	D
1	Amount	Yearly Amount		Years To Repay
2	20,000	3,500		5.714285714
3				
4				Years To Repay
5				5

The INT function rounds a number down to a whole number. So in this instance, the result of INT(D2) is 5.

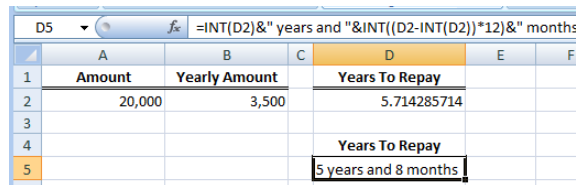
3. With cell D5 still selected, type in =INT((D2-INT(D2))\*12) and press *Enter*.

	A	B	C	D
1	Amount	Yearly Amount		Years To Repay
2	20,000	3,500		5.714285714
3				
4				Years To Repay
5				8

**D2-INT(D2)** in the above formula subtracts the integer of the year number (5) from the actual year amount (5.714285714) which leaves the decimal points. The result is then multiplied by 12 to get a value for the correct number of months, which is then also then made an integer, giving the result of 8.

Now that we know we can get the year value and the months value, it is time to combine them with some concatenation

4. With cell D5 still selected, type in `=INT(D2)&" years and "&INT((D2-INT(D2))*12)&" months"` and press *Enter*.



	A	B	C	D	E	F
1	Amount	Yearly Amount		Years To Repay		
2	20,000	3,500		5.714285714		
3						
4				Years To Repay		
5				5 years and 8 months		

Using the concatenation symbol **&** to combine our examples with the words “ **years and** “ and “ **months**”, we now have a complete answer (**5 years and 8 months**).

If you have any suggestions for an Excel Tips & Tricks topic, or you would like help with a particular function, please email [enablement@alchemex.com](mailto:enablement@alchemex.com) and yours could be the next Tip Of The Week.

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