

To start, if you haven't already done so run the script in the above folder to generate the **MAM** database (not for commercial use or copying).

Create the following data model:

You'll need to import (deep breath)

*the **Animal, Centre, Pos, Product, Quadrant, Region, Species, Store, Town and Transaction** tables.*

Use this to create the following basic pivot table:

Sum of Quantity Column	East	North	South	West	Grand Total
Row Labels					
Amphibian	1,015	4,276	4,241	2,136	11,668
Bird	3,476	15,429	14,736	7,471	41,112
Mammal	4,929	22,136	21,068	10,800	58,933
Reptile	3,471	15,249	15,013	7,337	41,070
Grand Total	12,891	57,090	55,058	27,744	152,783

This pivot table shows total quantities sold by quadrant and species.

Add a measure which (you think) should give the total quantity sold for four-legged animals only:

```
=SUMX(FILTER(Animal,Animal[Legs]=4),'Transaction'[Quantity])
```

You should find this gives an error:

ERROR - CALCULATION ABORTED: Calculation error in measure 'Transaction'[

The start of the error message.

The problem is that you can't filter by one dimension but sum a column in another. To get round this, use the **RELATED** function to include the number of legs each animal has within the transactions table:

Price	Quantity	LegCount	Add Colu
12.45	1	0	
12.45	1	0	
12.45	1	0	

This is what your new column should look like.

Amend your measure and add another one to report on total quantity sold by quadruped and non-quadruped:

Column Labels						
Row Labels	East			North		
	Quadrupeds	Other	Sum of Quantity	Quadrupeds	Other	Sum of Quantity
Amphibian	1,015		1,015	4,276		
Bird		3476	3,476		15429	
Mammal	4,929		4,929	22,136		
Reptile	989	2482	3,471	4,406	10843	
Grand Total	6,933	5958	12,891	30,818	26272	

The figures to watch are those for reptiles, since this species includes snakes (0 legs) and crocodiles (4 legs).

When you've got this working, save the workbook as **Four legs good** (you may well need it again soon!), and close it down.