

Depreciation

Suppose a car costs £20000 new and each year it devalues by 20% of its value at the beginning of that year

New	£20000	
	<u>4000</u>	20%
Yr1	£16000	
	<u>3200</u>	20%
Yr2	£12800	
	<u>2560</u>	20%
Yr3	£10240	
	<u>2048</u>	20%
Yr4	<u>£8192</u>	

After 4 years it is worth £8192

By calc to take off 20% we multiply by 0.8

$$\therefore £20000 \times 0.8^4 = £8192$$

Could use a formula similar to compound interest formula

$$\text{Value} = \text{Original} \times \left(1 - \frac{r}{100}\right)^n$$