**Key Ideas:**

* Simple Interest – Money earned/owed on invested/borrowed
* Principal – The amount invested/borrowed
* Rate – The annual interest rate
* Term - The length of the loan
	+ always needs to be in years
	+ 30 months = 2.5 years
* Simple interest formula
	+ $Interest=\frac{Principal×Rate×Term}{100}$
* The total amount is the amount invested or loan plus the interest
	+ $Total amount=Principal+Interest$
* If we want to find the rate
	+ $Rate=\frac{Interest×100}{Principal×Term}$
* If we want to find the term
	+ $Term=\frac{Interest×100}{Rate×Principal}$
	+ Will give the answer in years
* If we want to find the principal
	+ $Principal=\frac{Interest×100}{Rate×Term}$

**Example 1**

Find the interest on $600 invested at 8% for 24 months

$$24 months ÷12=2 years$$

$$Interest=\frac{\$600×8×2}{100}=\$96$$

**Example 2**

Find the total amount paid back when $1,000 borrowed at 12% for 48 months

$$48 months ÷12=4 years$$

$$Interest=\frac{\$1000×12×4}{100}=\$480$$

$$Amount paid back=480+1000=\$1,480$$

**Example 3**

$56.25 interest is earned on $450 for 30 months. Find the rate.

$$30 monts÷12=2.5 years$$

$$Rate=\frac{Interest×100}{Term×Principal}=\frac{56.25×100}{2.5×450}=5$$

$$Rate=5\%$$