

NOTES: Simple Interest

Interest	<p>*the extra \$ you earn if you put money into an account at a bank (ex: savings acct, money market, CD)</p> <p>*the extra \$ you pay back if you take a loan (in addition to the amt. you borrowed)</p> <p>Both are based on time and a percentage rate</p>
Simple Interest formula	<p style="text-align: center;">$I = PRT$</p> <p>Interest = (Principal)(Rate)(Time) Amt of \$ = (amt of \$)(%)(years)</p>
<p>Example 1</p> <p>Substitute what you know into formula</p>	<p>Interest = ? Principal = \$800 Rate = 6% Time = 2 years</p> <p>$I = prt$ $I = (800)(.06)(2)$ $I = \\$96$</p>
<p>Example 2</p> <p>When solving for "r" change the decimal into a % by moving decimal 2 to right</p>	<p>Interest = \$20 Principal = \$250 Rate = ? Time = 1 year</p> <p>$I = prt$ $20 = (250)(r)(1)$ $20 = 250r$ $\frac{20}{250} = \frac{250r}{250}$ $r = 0.08$ $r = 8\%$</p>
<p>Example 3</p> <p>Change months into a fraction of a year</p>	<p>Interest = \$100 Principal = ? Rate = 5% Time = 9 months</p> <p>$I = prt$ $100 = (p)(.05)(3/4)$ $100 = (0.0375)(p)$</p>

$$\frac{100}{0.0375} = \frac{(0.0375)(p)}{0.0375}$$

$$2666.67 = p$$

$$P = 2666.67$$

$$\text{Principal} = \$2666.67$$