

SUCCESS CENTER PRACTICE SHEET
Calculating Simple, Exact, and Ordinary Interest

Formula: $\text{Interest} = \text{Principal} * \text{Rate} * \text{Time}$

- 1) Calculate simple interest.
Principal = \$10,000
Rate = 8%
Time = 6 months
- 2) Calculate exact interest.
Principal = \$15,000
Rate = 6%
Time = 280 days
- 3) Calculate ordinary interest.
Principal = \$15,000
Rate = 6%
Time = 280 days
- 4) Calculate simple interest.
Principal = \$8,700
Rate = 12%
Time = 2 years
- 5) Calculate the principal.
Simple interest = \$50
Rate = 5%
Time = 1 month
- 6) Calculate the interest rate.
Principal = \$10,000
Time = 18 months
Interest = \$1,050
- 7) Calculate the time.
Principal = \$7,500
Rate = 10%
Interest = \$125
- 8) Calculate final payoff.
Principal = \$6,400
Rate = 6%
Time = 1 year
On the 30th day, \$400 was paid, and on the 70th day, \$350 was paid. On the due date of the loan, what was the payoff?

- 1) Calculate simple interest. $I = P \cdot R \cdot T$
Principal = \$10,000 $I = (\$10,000)(.08)(6/12)$
Rate = 8% $I = \$400$
Time = 6 **months**
- 2) Calculate **exact** interest. $I = P \cdot R \cdot T$
Principal = \$15,000 $I = (\$15,000)(.06)(280/365)$
Rate = 6% $I = \$690.41$
Time = 280 days
- 3) Calculate **ordinary** interest. $I = P \cdot R \cdot T$
Principal = \$15,000 $I = (\$15,000)(.06)(280/360)$
Rate = 6% $I = \$700$
Time = 280 days
- 4) Calculate simple interest. $I = P \cdot R \cdot T$
Principal = \$8,700 $I = (\$8,700)(.12)(2)$
Rate = 12% $I = \$2,088$
Time = 2 years
- 5) Calculate the principal. $I = P \cdot R \cdot T$
Simple interest = \$50 $\$50 = P(.05)(1/12)$
Rate = 5% $P = \$12,000$
Time = 1 month
- 6) Calculate the interest rate. $I = P \cdot R \cdot T$
Principal = \$10,000 $\$1,050 = (10,000)R(18/12)$
Time = 18 months $R = .07$
Simple interest = \$1,050 $R = 7\%$
- 7) Calculate the time. $I = P \cdot R \cdot T$
Principal = \$7,500 $\$125 = (\$7,500)(.10)T$
Rate = 10%
Simple interest = \$125
- 8) Calculate the final payoff. $I = P \cdot R \cdot T$
Principal = \$6,400 $I = (\$6,400)(.06)(30/360)$
Rate = 6% $I = \$32$
Time = 1 year 1st payment $\$400 - 32 = \368
Principal $\$6,400 - 368 = \$6,032$
On the 30th day, \$400 was paid, and on the 70th day, \$350 was paid. On the due date of the loan, what was the payoff? $I = (\$6,032)(.06)(40/360)$
 $I = \$40.21$
2nd payment $\$350 - 40.21 = \309.79
Principal $\$6,032 - 309.79 = \$5,722.21$
 $360 - 70 = 290$
 $I = (\$5,722.21)(.06)(290/360)$
 $I = \$276.57$
Payoff $\$5,722.21 + 276.57 = \$5,998.78$