

Name: KEY

Section 7.2 – Interest and Deductions

Simple Interest:  $I = Prt$

Compound Interest:  $A = P \left(1 + \frac{r}{n}\right)^{nt}$

<p>If I invest \$5000 in a GIC that pays me 6% interest over a five-year period, how much interest do I make?</p> <p><math>P = 5000</math>  <math>r = 0.06</math> (6%)  <math>t = 5</math></p> <p><math>I = 5000(0.06)(5)</math></p> <p><math>I = \\$1500</math></p>	<p>If I invest \$32 000 in a Mutual Fund that pays me 8%, is compounded monthly, over a 7 year period, what is my new amount at the end of the seven years and how much is interest?</p> <p><math>P = 32000</math>    <math>n = 12</math>  <math>r = 0.08</math>      <math>t = 7</math></p> <p><math>A = 32000 \left(1 + \frac{0.08}{12}\right)^{12 \cdot 7}</math></p> <p><math>A = 32000 (1.006667)^{84}</math></p> <p><math>A = 55917.51</math></p> <p><math>I = A - P \rightarrow 23917.51</math></p>																										
<p>I make \$5600 GROSS monthly, determine what bracket I fall into annually, deduct my necessary income, EI, and CPP taxes. Determine my NET annual salary and how much I would receive NET pay on a bi-weekly paystub.</p> <p><math>5600 \cdot 12 = 67200</math> annually</p> <p>18.4%          1.66%          4.95%</p> <p><u>25.01% Total Deductions</u></p> <p><math>67200 \cdot 0.2501 = 16806.72</math></p> <p>NET ANNUAL = <math>67200 - 16806.72</math>  <math>= 50393.28</math></p> <p>NET BI-WEEKLY = <math>50393.28</math></p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>Taxable Income</th> <th>Average Tax Rate</th> </tr> </thead> <tbody> <tr><td>\$30 000</td><td>12.4%</td></tr> <tr><td>\$40 000</td><td>14.3%</td></tr> <tr><td>\$50 000</td><td>16.4%</td></tr> <tr><td>\$60 000</td><td>18.4%</td></tr> <tr><td>\$70 000</td><td>19.8%</td></tr> <tr><td>\$80 000</td><td>20.8%</td></tr> <tr><td>\$90 000</td><td>22.0%</td></tr> <tr><td>\$100 000</td><td>23.4%</td></tr> <tr><td>\$110 000</td><td>24.8%</td></tr> <tr><td>\$120 000</td><td>26.1%</td></tr> <tr><td>\$130 000</td><td>27.2%</td></tr> <tr><td>\$140 000</td><td>28.2%</td></tr> </tbody> </table> <p style="text-align: right;">EI: 1.66%                  CPP: 4.95%</p>	Taxable Income	Average Tax Rate	\$30 000	12.4%	\$40 000	14.3%	\$50 000	16.4%	\$60 000	18.4%	\$70 000	19.8%	\$80 000	20.8%	\$90 000	22.0%	\$100 000	23.4%	\$110 000	24.8%	\$120 000	26.1%	\$130 000	27.2%	\$140 000	28.2%
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$= \frac{26}{100} \cdot 50393.28$   
 $= \$1938.23$