Name __Key__   Date _____

Calculating Interest - Independent Practice Worksheet $I = p \cdot r \cdot t$

Complete all the problems.

1. Richard deposited $5,500 for 6 years on 2.40% (0.024)
interest rate in his saving account. How much simple
interest will he earn? $I = 5500 \cdot (0.024) \cdot 6$
                                 $I = \$792$

2. Principal = $47,300, Rate = 3%, Time = 4 $\frac{4}{12} = \frac{1}{3} = (0.3)$
months. What will that total principal + interest $I = p \cdot r \cdot t$
payment be?   47,300 + 425.70 = $I = 47,300 \cdot$
                $\$47,725.70$ $0.03 \cdot (0.3)$
                                        $I = \$425.70$ *slightly different
                                                         answer if
                                                         you use $\frac{1}{3}$.

3. Andrew borrows $79,500 for 5 months on 6.30% interest rate in his
saving account. Calculate the simple interest? $\frac{5}{12} = 0.42$ $I = p \cdot r \cdot t$
                                                                                   $I = 79,500 \cdot (0.063) \cdot (0.42)$
                                                                                   $I = 2103.57$

4. Nelson lands $4,650 on 2% interest rate. He plans to pay this after 2 $I = p \cdot r \cdot t$
months. What will that total principal + interest payment be? $I = 4650 \cdot (0.02)(0.17)$
   $\frac{2}{12} = \frac{1}{6} = 0.17$ 4650 + 15.81 = 4665.81 $I = \$15.81$

5. Principal = $6,000, Rate = 7%, Time = 1 year. Calculate the simple
interest? $I = p \cdot r \cdot t$
                   $I = 6000 \cdot (0.07) \cdot 1$
                   $I = \$420$

6. Diana takes a loan of $10,000 on 3% interest rate. She plans to pay the
loan off after 2 years. Calculate the simple interest? $I = p \cdot r \cdot t$
                                                                 $= 10,000 \cdot (0.03) \cdot 2$
                                                                 $I = \$600$

7. Kelly borrows $5,200 on 4% interest rate for 6 months. What will that
total principal + interest payment be? $\frac{6}{12} = \frac{1}{2}$ $I = p \cdot r \cdot t$
                                                                                  $= 5200 \cdot (0.04) \cdot (0.5)$
        5200 + 104 = 5304 $I = \$104$

8. John wants to open a showroom for that he borrows $48,000 on 12%
interest rate. He plans to pay this after 4 years. What will that total principal
+ interest payment be? $I = p \cdot r \cdot t$
   48,000 + 23040 = $71,040$ $I = 48,000 \cdot (0.12) \cdot 4$
                                      $I = 23040$

9. Principal = $2,400, Rate = 2%, Time = 2 months. Calculate the simple
interest? $I = p \cdot r \cdot t$ $\frac{2}{12} = \frac{1}{6} = (0.17)$
                   $I = 2,400 \cdot (0.02) \cdot (0.17)$
                   $I = \$8.16$

10. Bob takes a loan of $7,000 on 5% interest rate for 5 months. Calculate
the simple interest? $I = p \cdot r \cdot t$ $\frac{5}{12} = (0.42)$
                              $I = 7,000 \cdot (0.05) \cdot (0.42) \cdot$
                              $I = \$147$