Name: _____ Class: _____ Date: _____

Simple and Compound Interest Practice Worksheet

[Always SHOW YOUR WORK when appropriate …use additional paper if necessary]

1. The amount paid to a depositor for keeping their money in a savings account is called:

   A. principle B. term C. interest D. rate

2. The _____ determines how much is paid to the depositor each year.

   A. principle B. term C. interest D. rate

3. The amount of the original investment is called:

   A. principle B. term C. interest D. rate

4. Fill-in the appropriate words below:

   a.) _____ interest is paid on principle only.

   b.) _____ interest is paid on both principle and interest.

5. The formula for **simple interest** is:

   _____

6. The formula for the **ending balance** on an account with simple interest is:

   Find I, then add that amount to the original principle.

7. The formula for the **ending balance** on an account with compound interest is:

   _____

8. In the simple interest formula i = p x r x t ($I = P \cdot r \cdot t$)

   a.) What does the "p" represent? _____

   b.) What does the "r" represent? _____

   c.) What does the "t" represent? _____

9. Use **simple interest** to find the ending balance in the examples below:

a.) $210 invested at 8% for 7 years

$I = Prt$

$I = 210(.08)7$

$I = 117.60$ (this is interest)

Ending balance would by $210 (the principle) + $117.60 (the interest) = 327.60

b.) $4000 invested at 3% for 4 years

c.) $34,000 invested at 4% for 3 years

d.) $2300 invested at 7.5% for 10 years

10. Use **compound interest** to find the ending balance in the examples below: $A = P(1+r)^n$

a.) $1,250 invested at 8% compounded annually for 2 years

P=

r=

n=

$A = 1{,}250(1+.08)^2$

$A = 1{,}250(1.08)^2$

$A = \$1{,}458$ This is the ending balance.

b.) $650 invested at 7% compounded annually for 5 years

c.) $10,000 invested at 7.8% compounded annually for 2 years

d.) $7,500 invested at 6% compounded annually for 15 years

11. How much interest is earned on a principle of $646 invested at a **simple interest** rate of 5% for 10 years?

12. How much interest is earned on a principle of $646 invested at a **compound interest** rate of 5% compounded annually for 10 years?

13. Does the amount of interest earned each year *increase*, *decrease*, or *stay the same* in a simple interest account? …in a compound interest account? Explain your answers.

_____

_____

_____