Compounded Interest Worksheet-Traditional

The formula for compounded interest is $f = P(1 + i)^n$

f – total money
P – principal amount
i – interest rate
n – number of compounding periods

1. P = \$3,000, i = 3%, n = 2; solve for f

$f = 3000 (1.03)^2 \rightarrow 3000 (1.06) = \$3,180$

2. P = \$2,500, i = 5.5%, n = 5; solve for f

$f = 2500 (1.055)^5 \rightarrow 2500 (1.31) = \$3,275$

3. P = \$650, i = 7%, n = 3; solve for f

$f = 650 (1.07)^3 \rightarrow 650 (1.225) = \$796.25$

4. f = \$3,180, i = 6%, n = 1; solve for P

$3180 = x (1.06)^1 \rightarrow x = 3180/1.06 = \$3,000$

5. f = \$4,410, P = \$4,200, n = 1; solve for i

$4410 = 4200 (1 + x)^1 \rightarrow 4410/4200 = (1 + x) \rightarrow 1.05 = 1 + x \rightarrow x = 0.05 = 5\%$