

1) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 10000(1.795856)$
 $FV = 17958.56$

2) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 10000(0.556837)$
 $PV = 5568.37$

3) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

4) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

5) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

6) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

7) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

8) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

9) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

10) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

11) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

12) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

13) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

14) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

15) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

16) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

17) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

18) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

19) $P = 10000$
 $r = 0.05$
 $n = 12$
 $FV = 10000(1 + 0.05)^{12}$
 $FV = 17958.56$

20) $P = 10000$
 $r = 0.05$
 $n = 12$
 $PV = 10000(1 + 0.05)^{-12}$
 $PV = 5568.37$

$r = 13.15\%$

$A = 12,000$
 $r = 0.05$
 $n = 3$

$$A = P(1+r)^n$$

$$12,000 = P(1+0.05)^3$$

$$P = \frac{12,000}{(1.05)^3}$$

$$P = 10,200$$

$A = 10,000$
 $r = 0.05$
 $n = 3$

$$A = P(1+r)^n$$

$$10,000 = P(1+0.05)^3$$

$$P = \frac{10,000}{(1.05)^3}$$

$$P = 8,400$$

$r = 10\%$
 $n = 3$

$$A = P(1+r)^n$$

$$10,000 = P(1+0.1)^3$$

$$P = \frac{10,000}{(1.1)^3}$$

$$P = 7,513 \text{ years}$$

11) $r = 1\%$
 $P = 100,000$
 $n = 8$

$$A = P(1+r)^n$$

$$A = 100,000(1+0.01)^8$$

$$A = 108,285.67$$

$$A = 126,677.00$$

$$A = 132,4,11,7089$$

a) A) $P = 50,000$ $t = 3$ $r = 0.05$ $n = 4$
 $50,000(1+0.05)^{12} = 63,412.1$
 b) $P = 50,000$ $t = 2$ $r = 0.1$ $n = 2$
 $A = 50,000(1+0.1)^{30} = 67,401.1$
 c) $P = 500,000$
 $r = 10\%$
 $n = 7$

OPTION B is better

$$500,000(1+\frac{0.10}{4})^7 = 512,500$$

$$500,000(1+0.10)^7 = 609,288$$