$\left(A+B+\frac{A\times B}{100}\right)\%$

$C.I \rightarrow 2r+\frac{r^2}{100}$

$C.I-S.I=\frac{PR^2}{100^2}$

$C.I \rightarrow 2:1$

3 वर्ष का

$C.I-S.I=\frac{PR^2(3\omega+R)}{100^3}$

$C.I \rightarrow 3R \mid 3R^2 \mid R^3$ ↳ ध्यान दें

$R \rightarrow 10\%$
$t \rightarrow 2$ वर्ष] 21%

$R \rightarrow 10\%$
$t \rightarrow 3$ वर्ष] CI = 33.1

$R \rightarrow 10\%$
$t \rightarrow 4$ वर्ष] CI = 46.4%

7. What will be the compound interest on ₹ 2000 for 2 years. If the rate of interest for 1st year is 4% & 3% for 2nd year.

C.I → 7.12%

2 वर्ष में प्रथम वर्ष के लिए 4% वार्षिक तथा द्वितीय वर्ष के लिए 3% वार्षिक दर पर चक्रवृद्धि ब्याज होगी, जबकि धनराशि ₹ 2000 है–

(A) ₹ 143.40 (B) ₹ 140.30

(C) ₹ 142 (D) ₹ 142.40

$4+3+\frac{4\times3}{100}$

7.12%

$\frac{2\cancel{000}\times7.12}{\cancel{100}\times\cancel{100}}=\frac{1424}{10}=142.40$ ₹

8. What will be the compound interest on ₹ 2000 for 2 years if the rate of interest is 10% & is compounded half-yearly?

10% वार्षिक चक्रवृद्धि ब्याज की दर पर, ₹ 2000, 2 वर्षों के बाद ब्याज के रूप में कितनी होगी, यदि ब्याज छमाही संयोजीत होता हो?

(A) ₹ 431
(B) ₹ 431.0125
(C) ₹ 343.246
(D) ₹ 440.20

$\frac{2000 \times 5}{100} = 100$

$\frac{100 \times 5}{100} = 5$

छमाही

$\frac{5 \times 5}{100} = 0.25$

$\frac{0.25 \times 5}{100} = 0.0125$

$R \rightarrow 5\%$

$t \rightarrow 4$ बार

Golden rule

$C.I \rightarrow 4 : 6 : 4 : 1$

$100 \quad 5 \quad 0.25 \quad 0.0125$

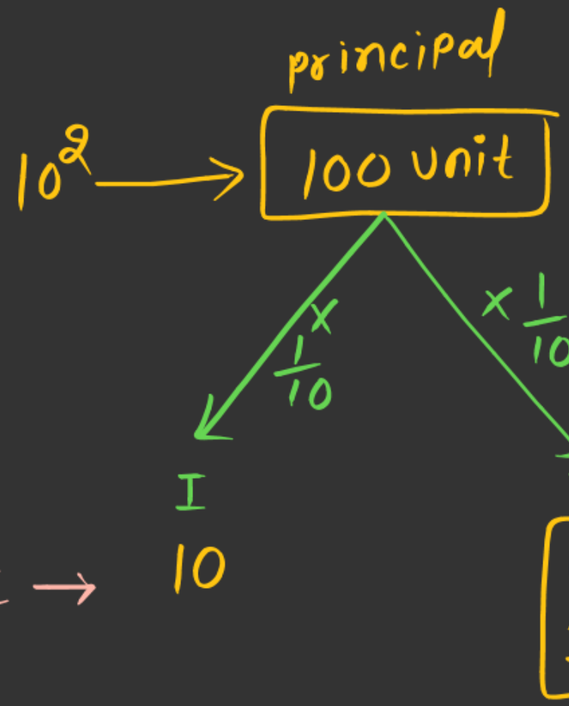
$400 + 30 + 1 + 0.0125$

431.0125

Tree method

$r \to 10\% \to \frac{1}{10}$

$t \to 2$ वर्ष



2nd year का C.I = 220₹ S.I → 10

11 unit = 220₹

1 unit = $\frac{220}{11}$ = 20₹

(i) S.I → 20 × 20 = 400₹

(ii) C.I → 21 × 20 = 420₹

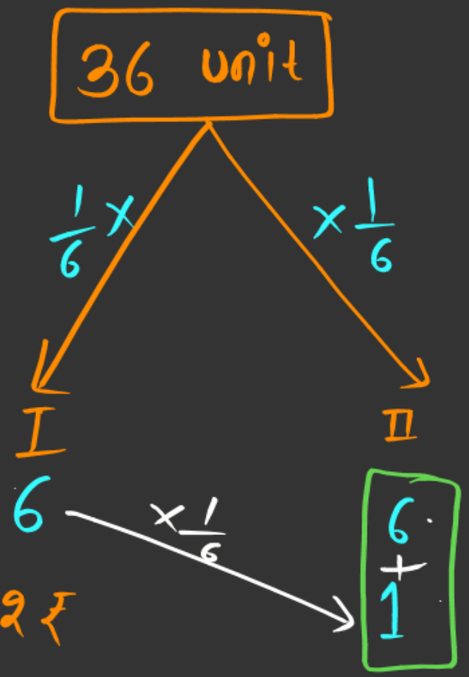
(iii) P → 100 × 20 = 2000₹

(iv) A → 121 × 20 = 2420₹

$r \to 16\frac{2}{3}\% \to \frac{1}{6}$

$t \to 2$ yrs

2nd year का C.I = 49₹



① P → 36 unit × 7 = 252₹

② C.I → 13 unit × 7 = 91₹

③ A → 49 unit × 7 = 343₹

7 unit = 49₹

1 unit = 7₹

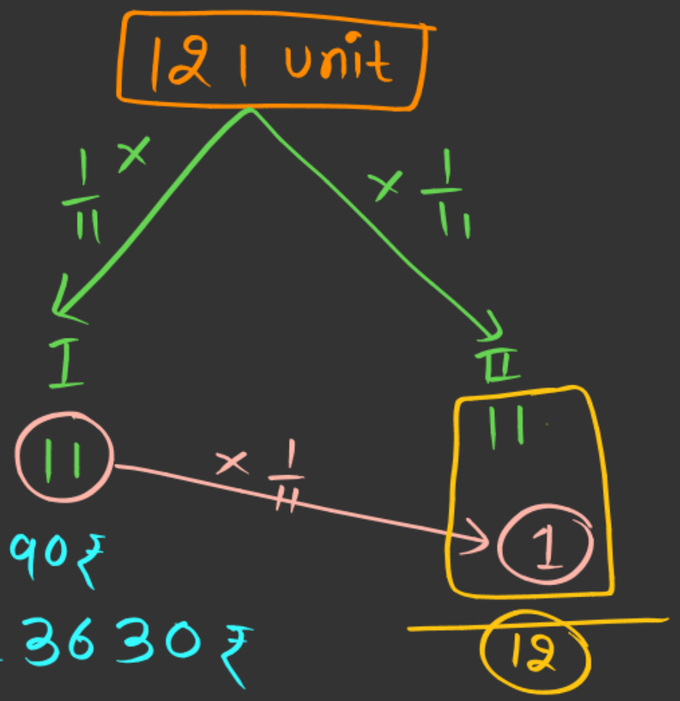
$16\frac{2}{3}\% = \frac{50}{3}\%$

$= \frac{\cancel{50}}{3 \times \frac{\cancel{100}}{2}} = \frac{1}{6}$

$r \rightarrow 9\frac{1}{11}\% \rightarrow \frac{1}{11}$

$t \rightarrow 2$ वर्ष

C.I − S.I → 30₹



S.I → 22
C.I → 23 (-)
1 unit = 30₹

① C.I ⟶ 23 unit × 30 = 690₹

② P ⟶ 121 unit × 30 = 3630₹

③ A ⟶ 144 unit × 30 = 4320₹

④ 2nd year का C.I → 12 unit × 30 = 360₹

40% = 2
5

$r \to 10\% \to \frac{1}{10}$

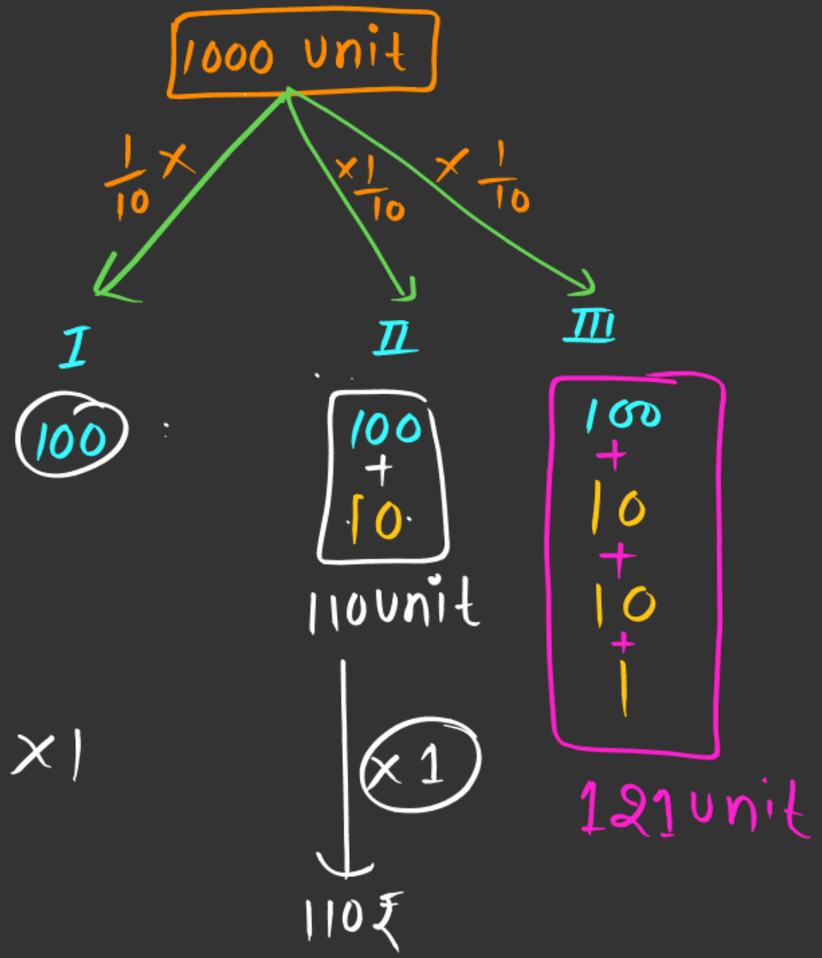
$t \to 3$ वर्ष

2nd year का C.I $\to$ 110 ₹

① P $\to$ 1000 unit $\times 1 = 1000$ ₹

② A $\to$ 1331 unit $\times 1 = 1331$ ₹

③ 3rd year का C.I $\to$ 121 unit $\times 1$
$= 121$ ₹



C.I $\to$ 331 ✓

A $\to$ 1000 + 331
1331

$r \rightarrow 16\frac{2}{3}\% \rightarrow \frac{1}{6}$

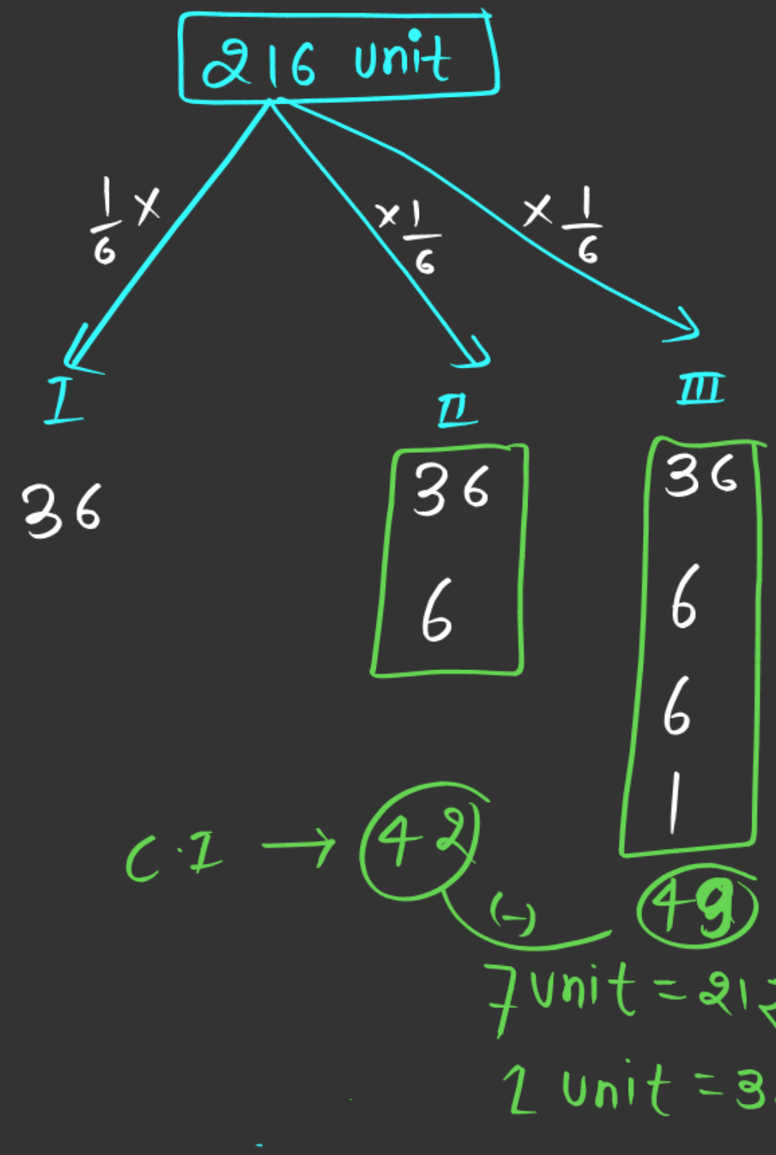
$t \rightarrow 3$ yr

$6^3 = 216$

3rd year का CI − 2nd year का CI = 21₹

① P → 216 unit × 3 = 648

② A → 343 unit × 3 = 1029



C.I → 127

A → 216 + 127

343

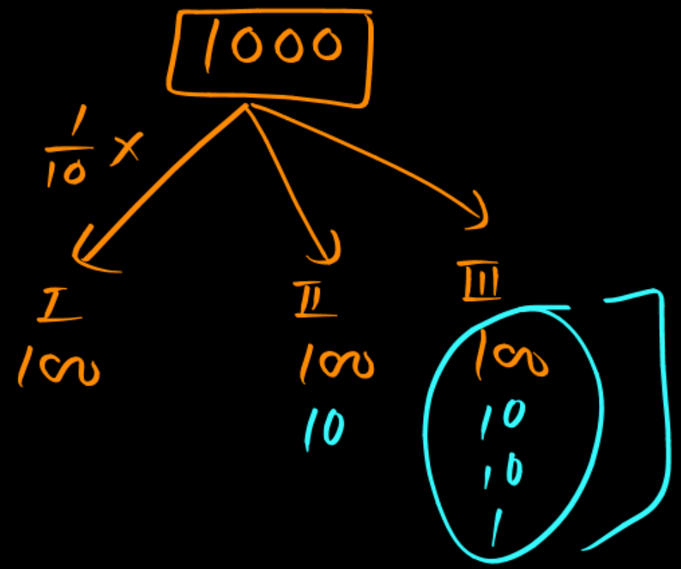
9. Compound interest for the third year at 10% P.A. is ₹ 605, what will be the principal ?

10% वार्षिक दर से तीसरे वर्ष का चक्रवृद्धि ब्याज ₹ 605 है, तो मूल धनराशि कितनी होगी?

(A) ₹ 4500 (B) ₹ 5600

(C) ₹ 5000 (D) ₹ 6000

$\frac{1}{10}$



121 → 605 ₹

1000 → $\frac{605}{121} \times 1000$

5000