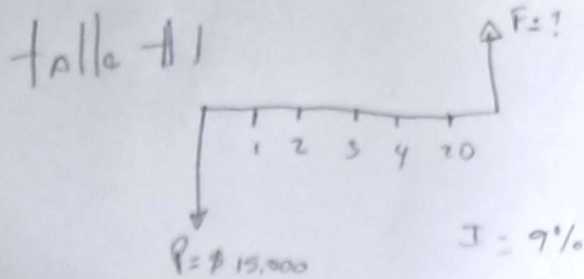


①  $P = 15,000$   
 $i = 0.09$   
 $n = 20$



$$F = 15,000 \times (1 + 0.09)^{20} = 15,000 \times (1.09)^{20}$$

$$F = 15,000 \times 5.604411 = 84,066.17$$

b)  $P = \frac{F}{(1+i)^n}$

$$P = \frac{100,000}{(1.09)^{20}} = \frac{100,000}{5.604411}$$

$$P = 17,840.06$$

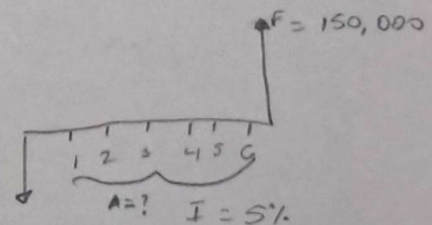
②  $A = F \times [i / ((1+i)^n - 1)]$

$$A = ?$$

$$F = \$150,000$$

$$i = 5\%$$

$$n = 6 \text{ anni}$$



$$150,000 \times [0.05 / ((1 + 0.05)^6 - 1)]$$

$$= 1.3400956$$

$$= 1.3400956 - 1 = 0.3400956$$

$$0.05 / 0.3400956 = 0.147017$$

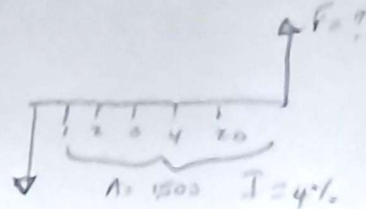
$$A = 150,000 \times 0.147017$$

$$= \$22,052.55$$

③  $A = 1,500$

$i = 0.04$

$n = 20$



$$F = 1,500 \times \frac{(1.04)^{20} - 1}{0.04}$$

$$F = 1,500 \times \frac{2.191123 - 1}{0.04} = 1,500 \times \frac{1.191123}{0.04}$$

$$F = 1,500 \times 29.777 = 44,667.15$$

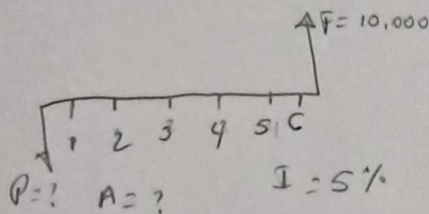
$$= \$44,667.15$$

④

$F = 10,000$

$i = 0.05$

$n = 6$



$$A = \frac{F \times i}{(1+i)^n - 1}$$

$$A = \frac{10,000 \times 0.05}{(1.05)^6 - 1} = \frac{500}{0.340096}$$

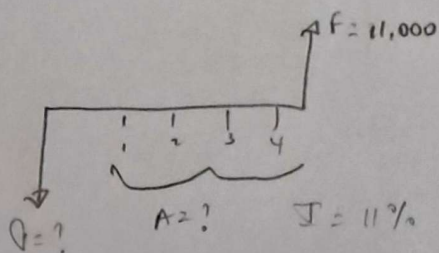
$$A = 1,470.20$$

⑤

$F = 11,000$

$i = 0.11$

$n = 4$



$$A = \frac{F \times i}{(1+i)^n - 1}$$

$$A = \frac{11,000 \times 0.11}{(1.11)^4 - 1} = \frac{1,210}{0.5181}$$

$$A = 2,335.63$$