$$V(x) + V(y) = V(x + y)$$
 $V(z) = \sum_{s \in s} (z(s) - E(z))^{2} \rho(s)$
 $Sol Z = X + y$
 $Si X el Y irdep Z(s) = X(s) + Y(s)$
 $E(z) = E(x) + E(y)$
 $V(x + y) = \sum_{s \in s} (x(s) + y(s) - E(x) - E(y))^{2}$
 $= (x(s) - E(x))^{2} - 2(-) + (y(s) + y(s))^{2}$
 $= V(x) + V(y) - (y(s) + y(s))^{2}$

$$V(z) = E(z^{2}) - E(z)^{2}$$

$$(-(E(x)^{2} + 2E(x)E(y) + E(y)^{2})$$

$$= E((x+y)^{2}) - E(x)^{2} - 2E(x)E(y)$$

$$= E(x^{2}) + 2E(x)E(y) + E(y^{2}) + E(y)^{2}$$

$$- E(x)^{2} - 2E(x)(y) - E(y)^{2}$$

$$= V(x) + V(y)$$

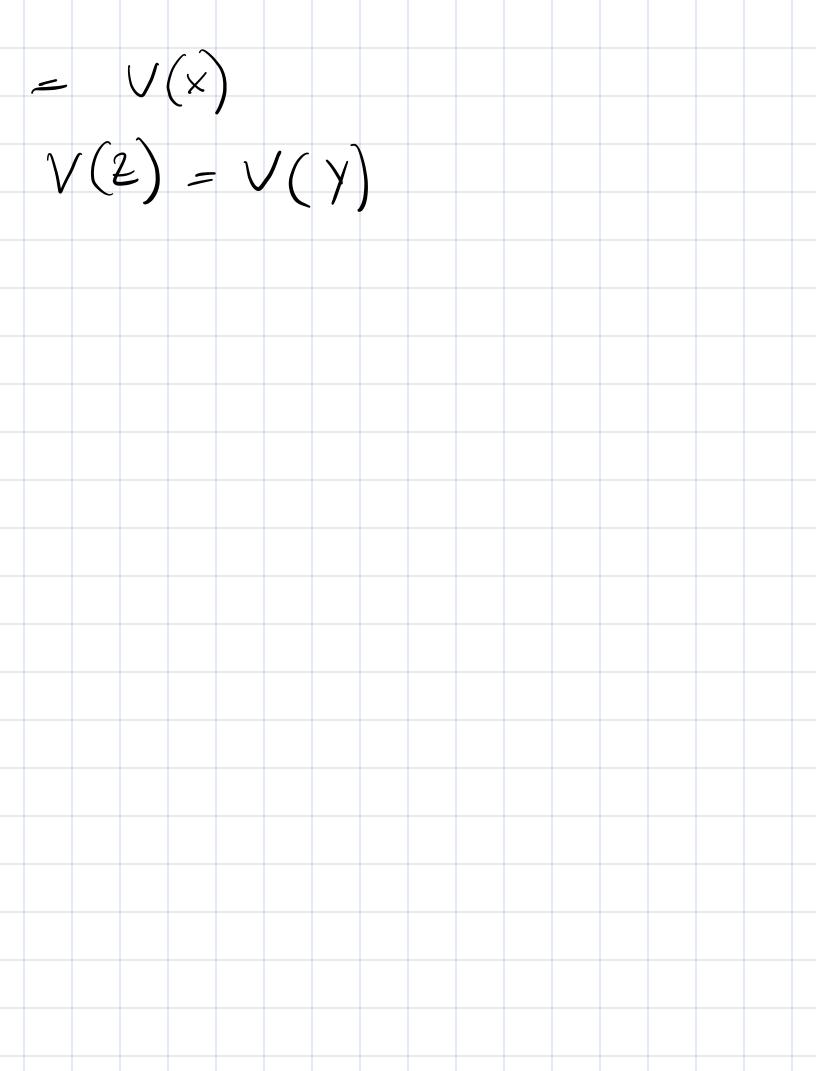
$$E(x+2\delta) = E(x) + 2\delta$$

$$= E(x)$$

(2)
$$V(x) = E(x^2) - E(x)^2$$

$$\sum_{k=1}^{1} \rho(x = k) \cdot k = \frac{2}{21} k^{2}$$

$$k^{2} = \frac{10}{21} k^{2}$$



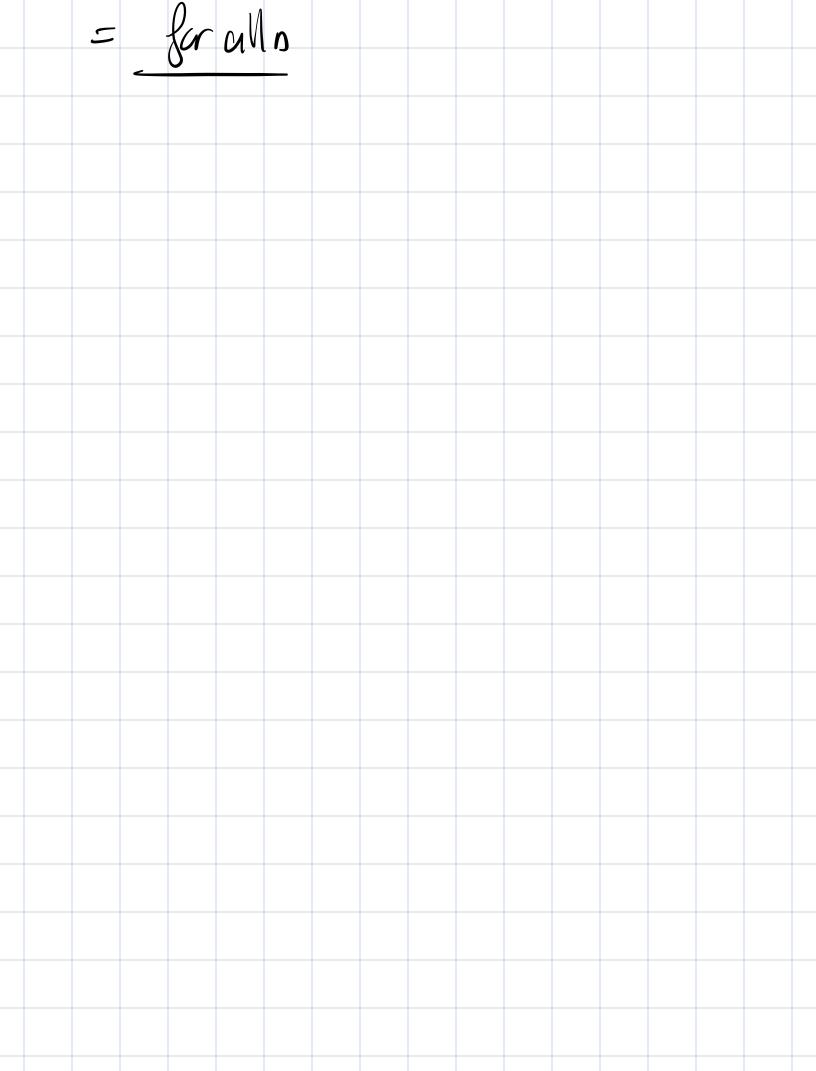
$$E(x) = \sum_{s \in s} \rho(x = s) \rho(s)$$

$$=\frac{1}{n}\left(\frac{n(n+1)}{2}\right)$$

$$=\frac{(n+1)}{2}$$
 for $n=4,6,8,$ $\infty,20$

· E(B)

$$= \mathcal{E}(x) \cdot \mathcal{E}(y) \dots$$



 $\forall n = \forall \tau + \forall H$ E(xn)= E(xr) + E(xr) O (nême probe)

$$, L(x) = R(x)$$

Basis Step

$$\cdot L(\lambda) = R(\lambda)$$

Induke Stop

Let's assume
$$L(a) = L(a)$$

and $L(a) = L(c)$

$$\frac{b}{a} = k \in b = ka$$

$$(x + y)$$

$$= \sum_{k=0}^{n} {n \choose k} x^{n-k} y^{k}$$

$$(x^{2} - \frac{1}{x})^{q}$$

$$(x^{$$

