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> h:=proc(P,lambda,X) P+lambda*(X-P) end;
      
$$h := \text{proc}(P, \lambda, X) P + \lambda * (X - P) \text{ end}$$

> P_1:=h(E_1, \lambda, P_0);

$$P_1 := h(E_1, \lambda, P_0)$$

X_1:=h(P_0, \xi, X_0);

$$X_1 := h(P_0, \xi, X_0)$$

X_2:=h(P_1, 1/\xi, X_1);

$$X_2 := h(P_1, 1/\xi, X_1)$$

X_3:=h(E_1,\lambda,X_1);

$$X_3 := h(E_1, \lambda, X_1)$$

X_4:=h(P_1, 1/\xi, X_3);

$$X_4 := h(P_1, 1/\xi, X_3)$$

X_5:=h(X_4, \xi,X_2);

$$X_5 := h(X_4, \xi, X_2)$$


$$P_1 := E_1 + \lambda (P_0 - E_1)$$


$$X_1 := P_0 + \xi (X_0 - P_0)$$


$$X_2 := E_1 + \lambda (P_0 - E_1) + \frac{P_0 + \xi (X_0 - P_0) - E_1 - \lambda (P_0 - E_1)}{\xi}$$


$$X_3 := E_1 + \lambda (P_0 + \xi (X_0 - P_0) - E_1)$$


$$X_4 := E_1 + \lambda (P_0 - E_1) + \frac{\lambda (P_0 + \xi (X_0 - P_0) - E_1) - \lambda (P_0 - E_1)}{\xi}$$


$$X_5 := E_1 + \lambda (P_0 - E_1) + \frac{\lambda (P_0 + \xi (X_0 - P_0) - E_1) - \lambda (P_0 - E_1)}{\xi} + \xi \left( \frac{P_0 + \xi (X_0 - P_0) - E_1 - \lambda (P_0 - E_1)}{\xi} - \frac{\lambda (P_0 + \xi (X_0 - P_0) - E_1) - \lambda (P_0 - E_1)}{\xi} \right)$$

> check:=h(X_1, 1/\lambda, X_5);

$$check := h(X_1, 1/\lambda, X_5)$$


$$check := P_0 + \xi (X_0 - P_0) + \left( E_1 + \lambda (P_0 - E_1) + \frac{\lambda (P_0 + \xi (X_0 - P_0) - E_1) - \lambda (P_0 - E_1)}{\xi} + \xi \left( \frac{P_0 + \xi (X_0 - P_0) - E_1 - \lambda (P_0 - E_1)}{\xi} - \frac{\lambda (P_0 + \xi (X_0 - P_0) - E_1) - \lambda (P_0 - E_1)}{\xi} \right) - P_0 - \xi (X_0 - P_0) \right) / \lambda$$

> simplify(check);

$$X_0$$

>

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