

bilinear_p^{13,42}

basic

$\text{IsBilinear}(A;B;C; + a;+b;+c;f)$

$$\begin{aligned} \equiv_{\text{def}} & (\forall a_1, a_2:A, b:B. ((a_1 + a_2) f b) = ((a_1 f b) + c (a_2 f b))) \\ & \& (\forall a:A, b_1, b_2:B. (a f (b_1 + b_2)) = ((a f b_1) + c (a f b_2))) \end{aligned}$$

clarification:

basic

$\text{IsBilinear}(A;B;C;+a;+b;+c;f)$

$$\begin{aligned} \equiv_{\text{def}} & (\forall a_1:A, a_2:A, b:B. ((a_1 + a_2) f b) = ((a_1 f b) + c (a_2 f b)) \in C) \\ & \& (\forall a:A. \forall b_1:B, b_2:B. (a f (b_1 + b_2)) = ((a f b_1) + c (a f b_2)) \in C) \end{aligned}$$