

C:/Users/torsten/GitHub/colore/ontologies/multidim_space_dim/dim_prime_linear.clif

1. $[\exists x \text{ MinDim}(x)]$.
2. $[\forall x ((\neg(\text{MaxDim}(x)) \vee (\text{S}(x) \wedge \neg(\text{ZEX}(x)) \wedge [\forall y (\neg(\text{S}(y)) \vee \text{leq}(y, x))])) \wedge (\neg(\text{S}(x) \wedge \neg(\text{ZEX}(x)) \wedge [\forall y (\neg(\text{S}(y)) \vee \text{leq}(y, x))]) \vee \text{MaxDim}(x)))]]$.
3. $[\forall x ((\neg(\text{MinDim}(x)) \vee (\text{S}(x) \wedge \neg(\text{ZEX}(x)) \wedge [\forall y (\neg(\text{S}(y) \wedge \neg(\text{ZEX}(y))) \vee \text{leq}(x, y))])) \wedge (\neg(\text{S}(x) \wedge \neg(\text{ZEX}(x)) \wedge [\forall y (\neg(\text{S}(y) \wedge \neg(\text{ZEX}(y))) \vee \text{leq}(x, y))]) \vee \text{MinDim}(x)))]]$.
4. $[\forall x \forall y (\neg(\text{leq}(x, y)) \vee \text{S}(x))]$.
5. $[\forall x \forall y (\neg(\text{leq}(x, y)) \vee \text{S}(y))]$.
6. $[\forall x (\neg(\text{ZEX}(x)) \vee \text{S}(x))]$.
7. $[\forall x (\neg(\text{S}(x)) \vee \text{leq}(x, x))]$.
8. $[\forall x \forall y \forall z (\neg(\text{leq}(x, y) \wedge \text{leq}(y, z)) \vee \text{leq}(x, z))]$.
9. $[\forall x \forall y (\neg(\text{ZEX}(x) \wedge \text{ZEX}(y)) \vee =(x, y))]$.
10. $[\forall x \forall y (\neg(\text{ZEX}(x) \wedge \text{S}(y)) \vee \text{leq}(x, y))]$.