

t84\_matrixr2  
(TMVXmDxzVT7SgB8S6sKF2APW5MHfr9MAHe3)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_matrixr2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_matrixr2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_matrixr2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_matrixr2 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 X0 k5\_numbers) \wedge (m1\_matrix\_1 X1 k1\_numbers X0 X0)) \Rightarrow (m1\_matrix\_1 (k7\_matrixr2 X0 X1) k1\_numbers X0 X0) \tag{1}$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1. (m1\_matrix\_1 X1 k1\_numbers X0 X0) \Rightarrow ((v1\_matrixr2 X1 X0) \Rightarrow (\forall X2. (m1\_matrix\_1 X2 k1\_numbers X0 X0) \Rightarrow ((X2 = k7\_matrixr2 X0 X1) \Leftrightarrow ((k1\_matrixr2 X0 X2 X1 = k4\_matrixr2 X0) \wedge (k1\_matrixr2 X0 X1 X2 = k4\_matrixr2 X0)))))) \tag{2}$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1. (m1\_matrix\_1 X1 k1\_numbers X0 X0) \Rightarrow ((v1\_matrixr2 X1 X0) \Leftrightarrow (\exists X2. (m1\_matrix\_1 X2 k1\_numbers X0 X0) \wedge ((k1\_matrixr2 X0 X2 X1 = k4\_matrixr2 X0) \wedge (k1\_matrixr2 X0 X1 X2 = k4\_matrixr2 X0)))))) \tag{3}$$

**Theorem 1**

$$\forall X0. (m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1. (m1\_matrix\_1 X1 k1\_numbers X0 X0) \Rightarrow ((v1\_matrixr2 X1 X0) \Rightarrow (k7\_matrixr2 X0 (k7\_matrixr2 X0 X1) = X1)))$$