$$\neg\left((\forall x)(\exists y)P(x,y) \to (\exists x)(\exists y)R(x,y)\right) \wedge (\forall x)\neg(\exists y)Q(x,y)$$

$$\neg\left((\forall x_1)(\exists y_1)P(x_1,y_1) \to (\exists x_2)(\exists y_2)R(x_2,y_2)\right) \wedge (\forall x_3)\neg(\exists y_3)Q(x_3,y_3)$$

$$\neg\left((\exists x_1)(\forall y_1)\left(P(x_1,y_2) \to (\exists x_2)(\exists y_2)R(x_2,y_2)\right)\right) \wedge (\forall x_3)\neg(\exists y_3)Q(x_3,y_3)$$

$$(\forall x_1)(\exists y_1)(\forall x_2)(\forall y_2)\left(P(x_1,y_1) \to R(x_2,y_2)\right) \wedge (\forall x_3)(\forall y_3)\neg Q(x_3,y_3)$$

$$(\forall x_1)(\exists y_1)(\forall x_2)(\forall y_2)(\forall x_3)(\forall y_3)\left(P(x_1,y_1) \to R(x_2,y_2)\right) \wedge \neg Q(x_3,y_3)$$

$$(\forall x_1)(\forall x_2)(\forall y_2)(\forall x_3)(\forall y_3)\left(P(x_1,f(x_1)) \to R(x_2,y_2)\right) \wedge \neg Q(x_3,y_3)$$

move $f(x_1)$ za y_1