

# QUIZ XV

**Time: 10min**

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1. Let  $T : R^2 \rightarrow R^2$  be the linear transformation given by:

$$T(x, y) = (2x + y, x - 2y)$$

- (a) Show that  $T$  is one-to-one.
- (b) Find a formula for  $T^{-1}$ .