MATB24. Quiz #7, TUT # 4

(1) (4 point) In each part, give a <u>complete</u> definition, or mathematical characterization of the word in bold.
   (a) An **isometry**

(2) (3 point) Give an example of the described object or explain why such an example does not exist.
   (a) A non-orthogonal linear transformation that takes an orthogonal basis to an orthogonal basis

(3) (8 point) Answer the following question:
   (a) Find the complex fourth roots of -16.