A COMPUTER PROGRAM FOR THE KINETIC ANALYSIS OF A LINK-SEGMENT MODEL

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The computer program LINK has been created to aid the biomechanics instructor in the teaching and demonstration of kinetic analysis of a knee joint link-segment model. Written in the BASIC computer programming language, this program is designed to be a step-by-step demonstration tool complete with geometric diagrams, discussion of pertinent terms, and mastery tests. Input values are based upon anthropometric measurements, force values recorded from an isokinetic dynamometer (Cybex), and corresponding knee angles. Preset values may be selected for demonstration, or the user may input his/her own data. The output is calculated values of force, torque, and power (for the knee joint angles utilized). Specific geometry for these calculations are based upon the anthropometric measures. This computer program is written to be used with all IBM compatible microcomputers.