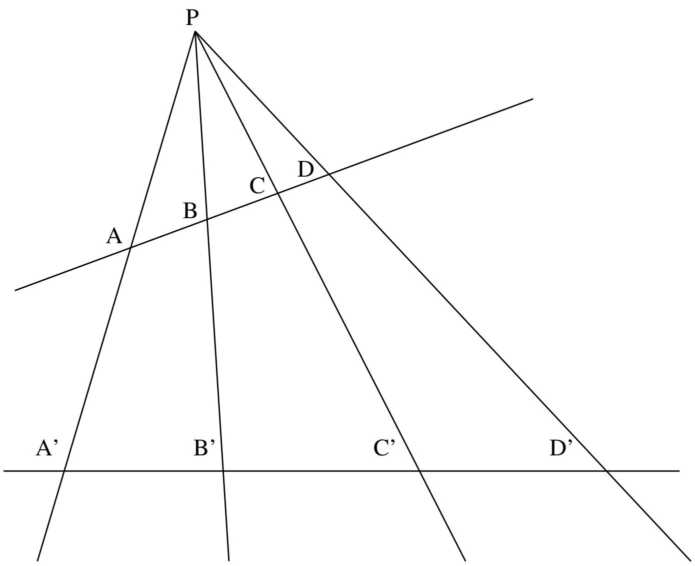
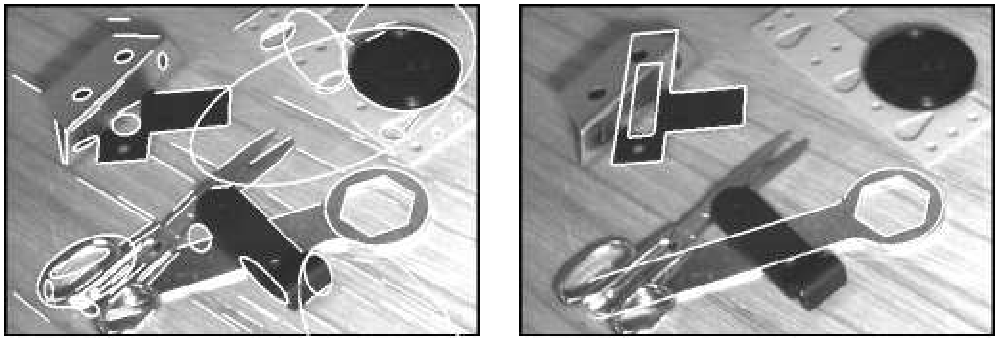


Figure 24.30 Invariance of the cross-ratio: AC.BD/AB.CD = A′C′.B′D′/A′B′.C′D′. Exercise 24.7 asks you to verify this fact.



(a) (b)

Figure 24.31 (a) A scene containing a number of objects, two of which also appear in the model library. These are recognized using invariants based on lines and conics. The image shows 100 fitted lines and 27 fitted conics superimposed in white. Invariants are formed from combinations of lines and conics, and the values index into a model library. In this case, there are 35 models in the library. Note that many lines are caused by texture, and that some of the conics correspond to edge data over only a small section. (b) The two objects from the library are recognized correctly. The lock striker plate is matched with a single invariant and 50.9% edge match, and the spanner with three invariants and 70.7% edge match. Courtesy of Andrew Zisserman.