

The projections of two **skew lines** AB and CD are shown.

- (a) Find a plane containing the line CD and parallel to the line AB.
- (b) Prove that the plane is parallel to the line.

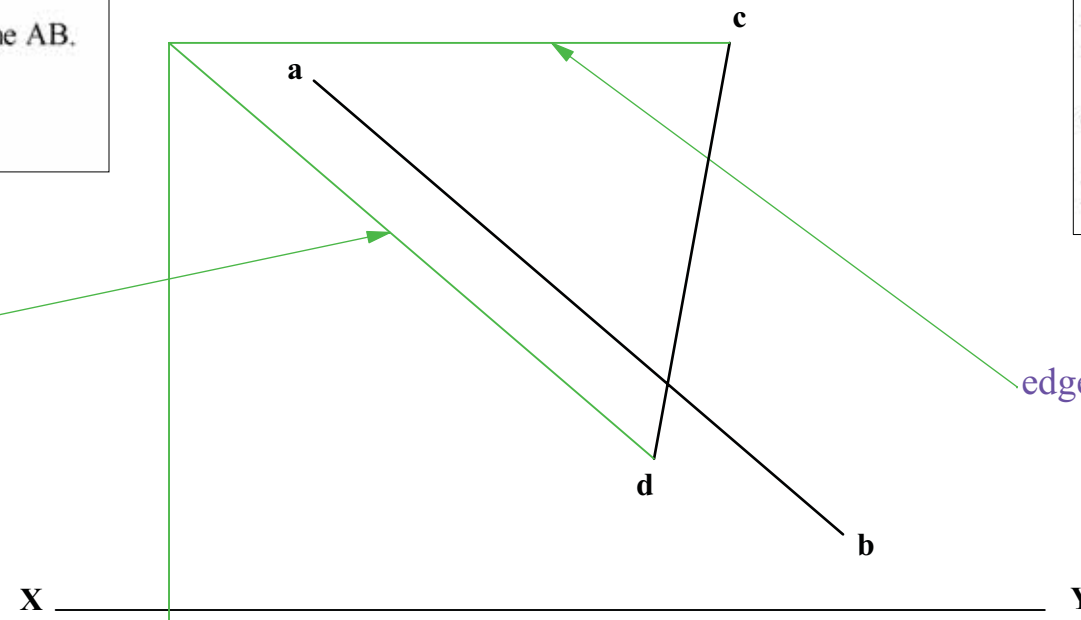
Key Principles

Parallel lines remain parallel in every view except in the views in which they appear as **points** or where one line is behind the other.

If a line is parallel to any line in the plane, it is parallel to the **plane**

elevation of line parallel to ab

edge view of horizontal cutting plane



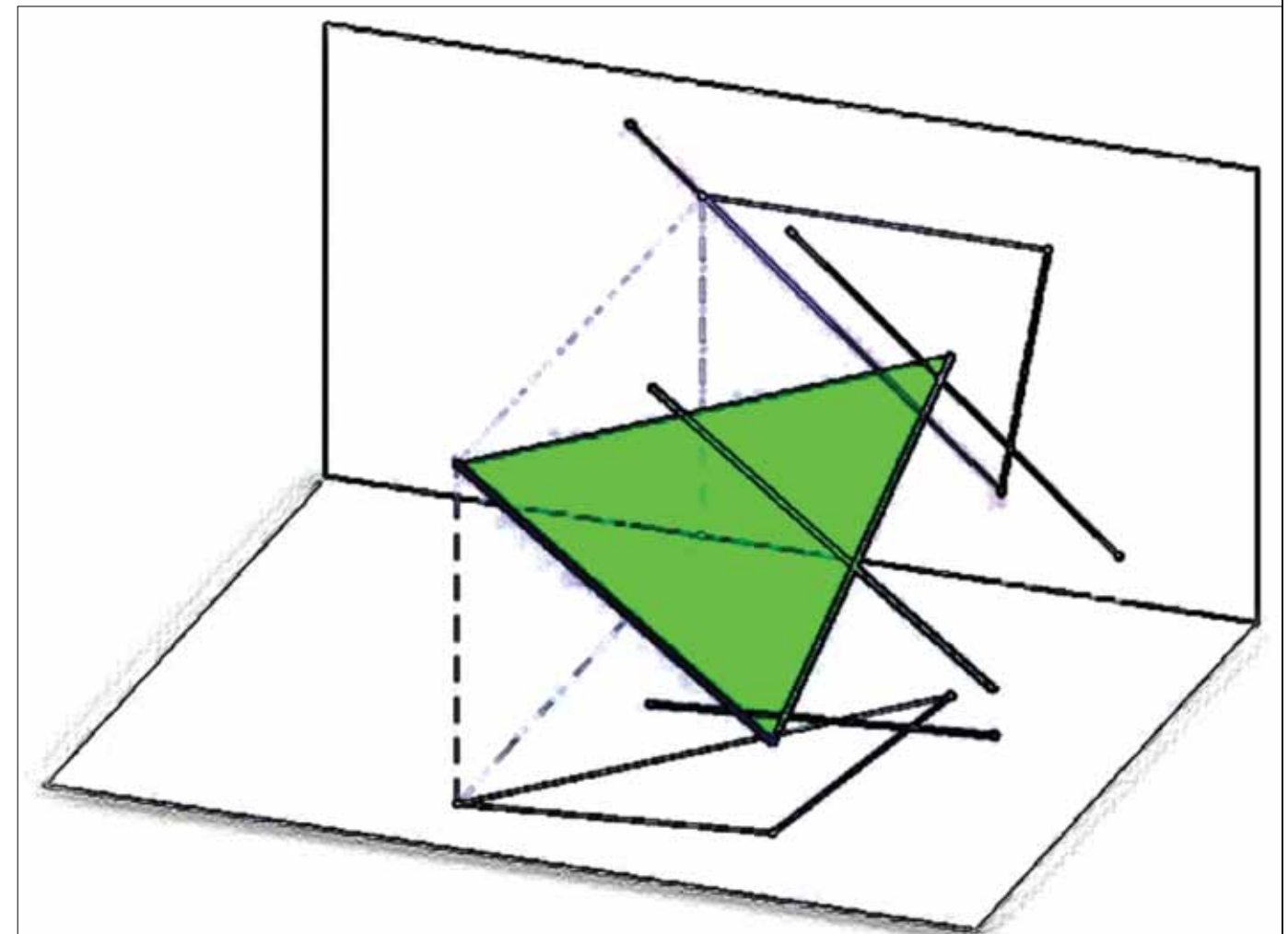
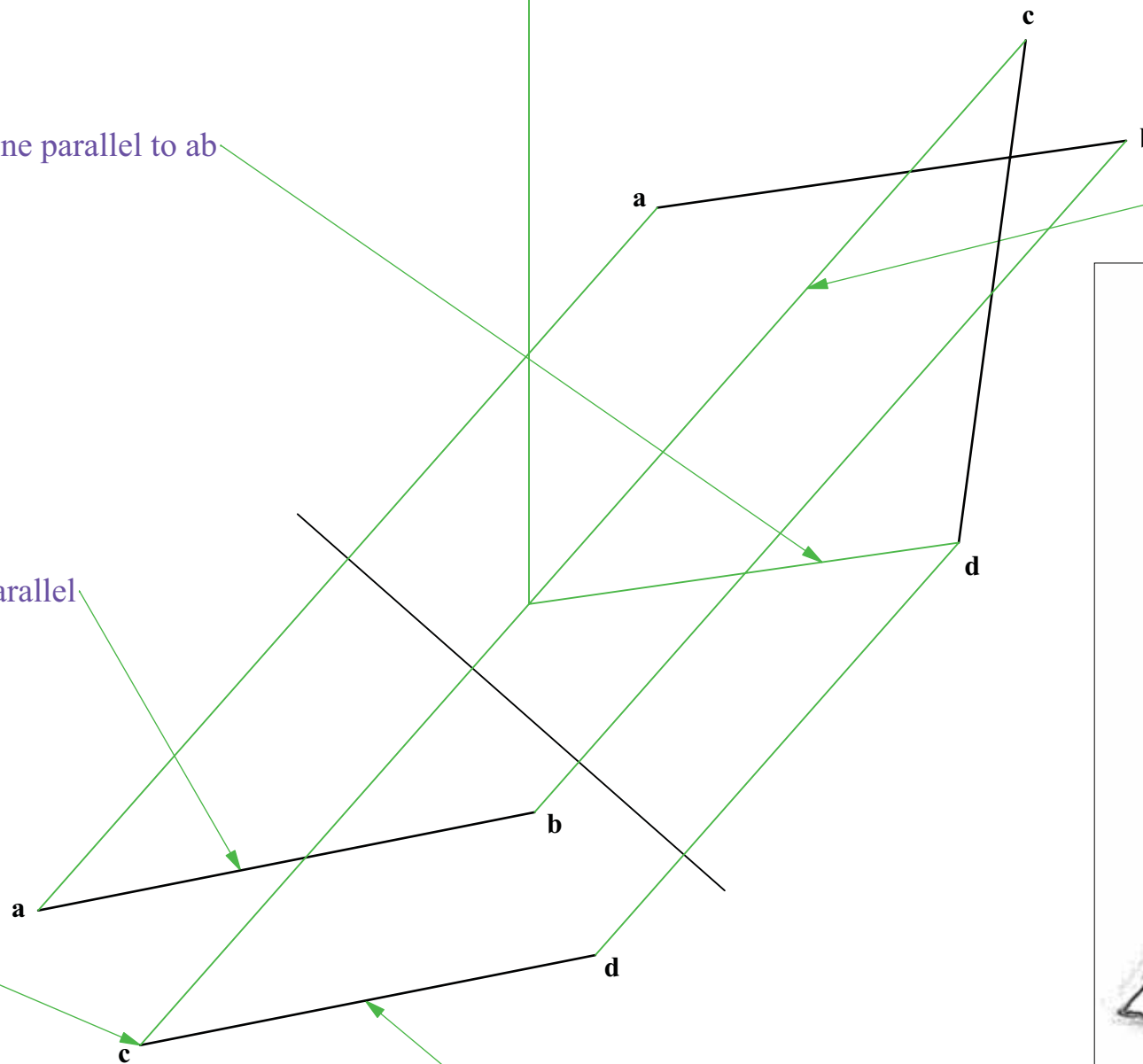
plan of line parallel to ab

true length of horizontal line on plane (strike)

line and plane are parallel

point view of strike

edge view of parallel plane

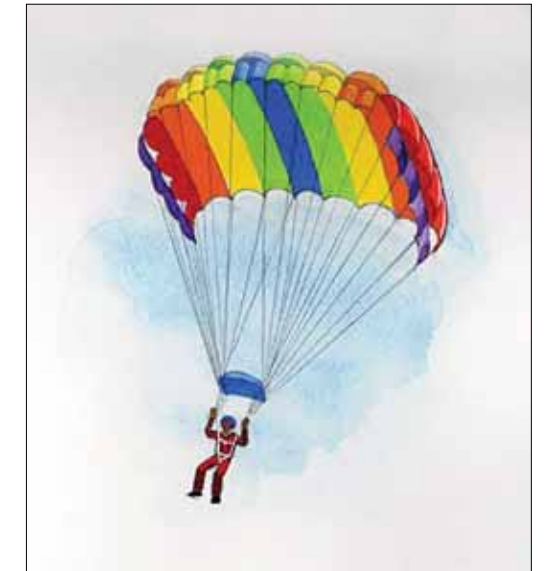


The directions of two parachute jumpers landing are represented by the two **skew lines** AB and CD.

- (a) Determine the **shortest distance** between the two skew lines.
- (b) Determine the projections of this shortest distance.

Key Principle

A plane is drawn containing one of the lines and having a line on it parallel to the other line.



true length of shortest distance

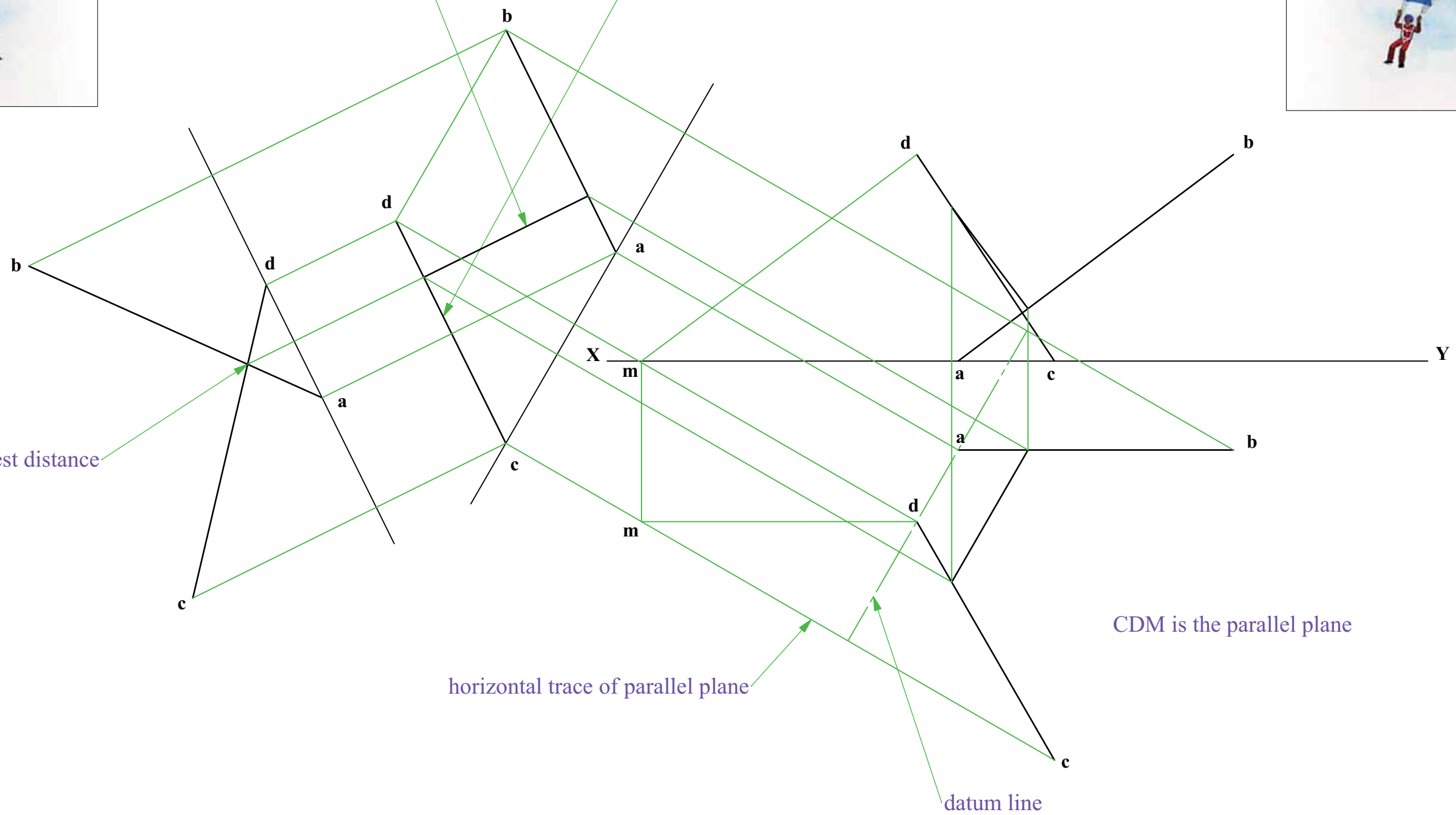
edge view of parallel plane

point view of shortest distance

CDM is the parallel plane

horizontal trace of parallel plane

datum line



The directions of two javelins are represented by the two **skew lines** AB and CD. The projections of the shortest distance between them are given.

Determine the projections of the **shortest horizontal distance** between them.

Key Principle

A plane is drawn containing one of the lines and having a line on it parallel to the other line.

