

Where it is desired to indicate that a limited length or area of a surface is to receive additional treatment or consideration within limits specified on the drawing, the extent of these limits may be indicated by use of a chain line. See Fig. 1-13.

**1.7.3 Limited Length or Area Indication**

**1.7.2.2 Locating Points or Intersections.** Where a point is located by extension lines only, the extension lines from surfaces should pass through the point or intersection. See Fig. 1-12.

**1.7.2.1 Crossing Extension Lines.** Wherever practical, extension lines should neither cross one another nor cross dimension lines. To minimize such crossings, the shortest dimension line is shown nearest the outline of the object. See Fig. 1-9. Where extension lines must cross other extension lines, dimension lines, or lines depicting features, they are not broken. Where extension lines cross arrowheads or dimension lines close to arrowheads, a break in the extension line is permissible. See Fig. 1-11.

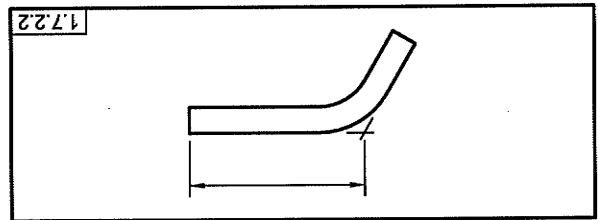
perpendicular to dimension lines. Where space is limited, extension lines may be drawn at an oblique angle to clearly illustrate where they apply. Where oblique lines are used, the dimension lines are shown in the direction in which they apply. See Fig. 1-10.

Extension lines are used to indicate the extension of a surface or point to a location preferably outside the part outline. See para. 1.7.8. On 2D orthographic drawings, extension lines start with a short visible gap from the outline of the part and extend beyond the outermost related dimension line. See Fig. 1-8. Extension lines are drawn

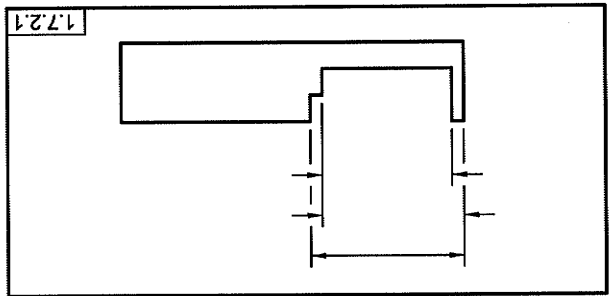
**1.7.2 Extension (Projection) Lines**

**1.7.1.4 Crossing Dimension Lines.** Crossing dimension lines should be avoided. Where unavoidable, the dimension lines are unbroken.

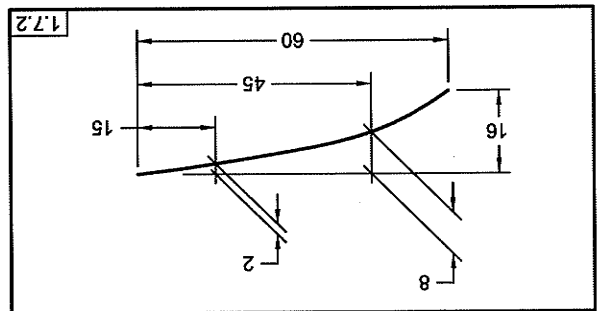
**1.7.1.3 Angle Dimensions.** The dimension line of an angle is an arc drawn with its center at the apex of the angle. The arrowheads terminate at the extensions of the two sides. See Figs. 1-3 and 1-6.



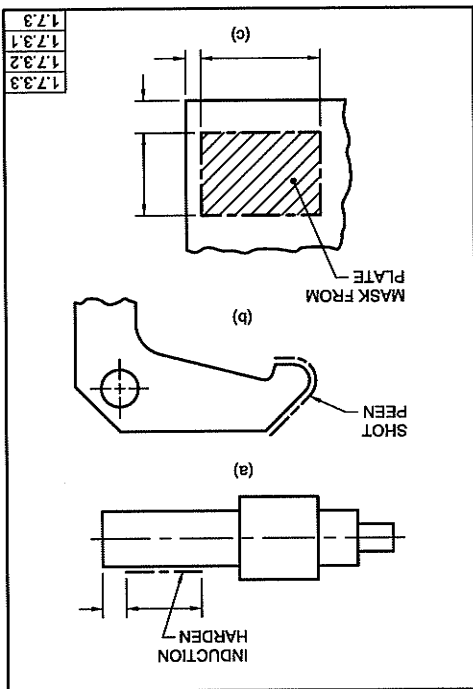
**Fig. 1-12 Point Locations**



**Fig. 1-11 Breaks in Extension Lines**



**Fig. 1-10 Oblique Extension Lines**



**Fig. 1-13 Limited Length or Area Indication**