

**Principles:** Every point on a contour line has the same elevation. Elevations on one side of the line are higher than elevations on the other side of the line.

**Example:** A circular hill, whose highest point is 1628 feet above sea level, is flanked by a smaller, lower hill to the east.

**Principles:** Contour lines do not cross each other or split. Widely spaced contour lines represent gentle slopes; closely spaced contour lines indicate steep slopes.

**Example:** A flat-topped mountain (mesa) in the center is surrounded by a cliff (closely spaced contours) on the west, south, and east sides.

**Principle:** Contour lines that cross stream valleys form a "V" pointing upstream.

**Example:** A small stream drains southward through a small valley (gully), in the direction of the arrow.

**Principle:** Concentric, closed contour lines represent a hill.

**Example:** Four hills form a curved ridge and are separated by small topographic low points (saddles), where the contours "pinch" together.

**Principle:** Closed depressions (representing basins with no outlet) are shown by closed contours with hachures (short lines) that point inward toward the depression.

**Example:** Small depressions, shown with hachures, sit on both sides of a line of four hills. The depressions are like the closed crater in the volcano-in-a-box. The hills are each shown by closed contours without hachures.

Figure 1-1. Examples of topographic features on contour maps.