

## Protocol 3-A: Determining Stream Slope with Topo Map

### Materials:

- Topo map of sampling area
- Field Data Sheet
- 2 people

### Method:

Determine the elevation change from the top of the reach to the bottom of the reach. In the example below, it is 10 feet elevation change (1 contour line).

Determine the straight line distance between the two points (top and bottom of reach), A to B.

Use the following equation to determine stream slope:

$$\frac{\text{elevation change (ft)}}{\text{stream distance (ft)}}$$

(note: slope is unitless)

Conversion factor: 1 meter = 3.2808399 feet

