Questions 1 through 4 refer to the following:

On the topographic map below, points $A$, $B$, $Y$, and $Z$ are reference points on the topographic map. The symbol $\Delta 533$ represents the highest elevation on Aurora Hill.

1) State the general compass direction in which Maple Stream is flowing.

2) Calculate the gradient between points $Y$ and $Z$ on the map. [Label the answer with the correct units.]

3) Describe the evidence shown on the map that indicates that the southern side of Holland Hill has the steepest slope.

4) On the grid below, construct a topographic profile from point $A$ to point $B$ by following the directions below.

(a) Plot the elevation along line $AB$ by marking with an $X$ each point where a contour line is crossed by line $AB$. [Points $A$ and $B$ have been plotted for you.]

(b) Complete the profile by correctly connecting the plotted points with a smooth, curved line.