Conceptual Questions

1. Slope of the triangle edge is 0:

Just use the X-coordinates of its endpoints as your pixel row bounds.

1. Slope of the triangle edge is undefined:

Just use the X-coordinate of either endpoint.

1. The triangle edge and pixel row do not overlap at all:

Just ignore the edge entirely.

Other conditions are solved by using line\_segement\_intersection by line’s slope.

1. .
2. If a point is outside the triangle, S1 + S2 + S3 > S.
3. It’s not more efficient than row bound checking. Because using Barycentric interpolation, we have to examine each pixel to determine which one is inside the triangle, while the row bound checking can save lots of computations.

### Code Requirements：

All Done.

### Extra Credit

5.1-5.3 is done, 5.4 ‘s progress can be seen in helplog.