A Challenge Question based on an Image from Elsewhere in *Playing with Polygons*

The image below is the vertex frame of this string art Sequence Player mode image sequence given ***n*** = 16. It is not at all part of the "*three sets of parallel lines*" types of problems in Part II of PwP because now there are four sets of parallel lines. Clearly, it looks like a blend between the Horizontal and *Slanted* versions of the Sharpest Right Triangles on Even Polygons portion of Part II.

The question, of course, is simple: *How many triangles of various sizes are included in this image?*

Here is a more general question. Suppose ***n*** = 2***k***+2. Draw lines in four directions, 0 (horizontal), 1 (parallel to 0-1), Vertical (parallel to 0 to ***n***/2 = ***k***+1) and steep positive 0 to ***k***+2. *How many triangles of various sizes are included in this image?*

Hint: Count peaks at vertices of the 16-gon as before, but look at those vertices at least twice, and perhaps four times depending on how you want to count.