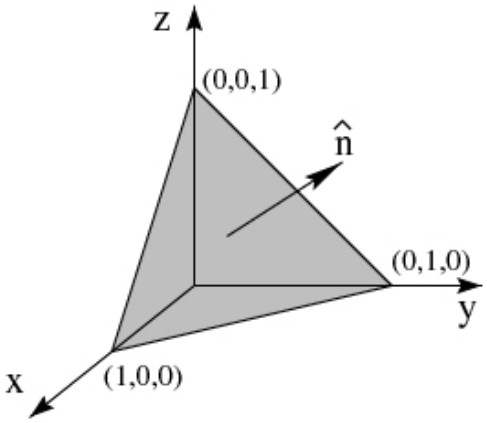
Student handout

Find the area of the part of the plane $x + y + 1$ in the first octant, as shown in the figure beolw.



Instructor's guide

- Students may have difficulty representing the sides of the triangle as vectors. Encouraging them to represent the corners as vectors may help.
- Students may have difficulty visualizing the triangle as half of a parallelogram – and may forget the factor of $\frac{1}{2}$ even once they recognize the need for the cross product.
- Some students will solve this problem geometrically, without vectors.