

Name: _____ ID: _____

1. Consider the triangle determined by the points $P(2, -1, 0)$, $Q(4, 1, 1)$, and $R(4, -5, 4)$. Compute the lengths of the sides of this triangle. Is it a right triangle? Is it an isosceles triangle?

2. Consider the line passing through the points $A(2, 4, -3)$ and $B(3, -1, 1)$.
- (a) Find parametric equations and symmetric equations of the line.

- (b) At what point does this line intersect the xy -plane?