

MATH 2415 Test 2

Name: _____

1. Find a Cartesian equation for the plane that contains the triangle ΔABC where $A = (0, 1, 7)$, $B = (4, 0, 2)$, $C = (3, 2, 5)$.

2. Given position $\mathbf{r} = \langle 3t^2, 5t - 4t^2, 7 - 2t \rangle$ at each time t :
- (i) What is the rate of change $d|\mathbf{v}|/dt$ of speed at $t = 1$?
 - (ii) What is the radius of curvature at $t = 1$?