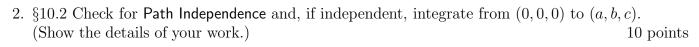
Fall 2020	ENG 5300	Quiz 1	Yufan Lu
You must show all	work to receive full credit	. All work is to be your own	09/28/2020
This is a closed how	oks and notes test. Be ord	ranized Total points: 20	19.44- 19.57

1. §10.1 Line Integral. Work done by a force. Calculate  $\int_C \mathbf{F}(\mathbf{r}) \cdot d\mathbf{r}$  for the following data. If  $\mathbf{F}$  is a force, this gives the work done in the displacement along C. (Show the details.)  $\mathbf{F} = [x+y, y+z, z+x], C : \mathbf{r} = [2t, 5t, t]$  from t = -1 to 1.



$$(\cos(x^2 + 2y^2 + z^2))(2x dx + 4y dy + 2z dz)$$