MA 227-103 — Summer 2017 — Dr. Clontz

Name:	Exercise T	Exercise Type:	
J#:	Quiz		
Date: 2017 July 10			
Standard: This student is able to		Mark:	
C08: TripleInt. Compute and apply triple integrals.			
4/4	\star reattempt due on:		

Let D be the solid bounded by the sphere $x^2+y^2+z^2=9$. Express $\iiint_D \sqrt{x^2+y^2+z^2}\,dV$ as a triple iterated integral of the variables x,y,z. (Do not solve this integral.)

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Name:	Exercise T	Type:
J#:	Quiz	
Date: 2017 July 10		
Standard: This student is able to		Mark:
S08: TransVar. Compute and apply a transformation of variables.		
1/3 * rea	ttempt due on:	

Let $\mathbf{T}(u,v) = \langle u+v+1, u-2v+3 \rangle$ be the transformation from the unit square G with vertices $\langle 0,0 \rangle$, $\langle 1,0 \rangle$, $\langle 1,1 \rangle$, $\langle 0,1 \rangle$ in the uv plane to the parallelogram R with vertices $\langle 1,3 \rangle$, $\langle 2,4 \rangle$, $\langle 3,2 \rangle$, $\langle 2,1 \rangle$ in the xy plane. Use this tranformation to calculate $\iint_R (2x+y) \, dA$.