## MA 227-103 — Summer 2017 — Dr. Clontz

Name:	Exercise Type:	
J#:	Quiz	
Date: <b>2017 July 19</b>		
Standard: This student is able to  C10: VectField. Analyze vector fields, including computing curl and divergence.	r o	Mark:
4/4 * reath	tempt due on:	

Find the curl and divergence of the vector field  $\mathbf{F}(x,y,z) = \langle x+z^2,y+x^2,z+y^2 \rangle$ . Then compute the curl and divergence of the vector field at the point  $\langle 3,-2,1 \rangle$ .

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Name:	Exercise 1	ype:
J#:	Quiz	
Date: <b>2017 July 19</b>		
Standard: This student is able to		Mark:
C11: LineInt. Compute and apply line integrals.		
2/4	reattempt due on:	
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Rewrite  $\int_C (x+2y) ds$  as a definite integral with respect to t, where C is the circle  $(x-2)^2 + (y-3)^2 = 4$ . (Do not solve this integral.)

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Name:	Exercise T	ype:
J#:	$\mathbf{Quiz}$	
Date: <b>2017 July 19</b>		
Standard: This student is able to  C12: FundThmLine. Apply the Fundamental Theorem of Line Integrals.		Mark:
1/4 * reatt	tempt due on:	

Find  $\int_C \mathbf{F} \cdot d\mathbf{r}$  where  $\mathbf{F} = \langle 2xz, -3z, x^2 - 3y \rangle$  and C is an unknown curve that begins at  $\langle 1, 1, 1 \rangle$  and ends at  $\langle 2, 0, 1 \rangle$ .