Name:	Exercise Type:
J#:	**Quiz**
Date: **2017 July 21**	

Standard: This student is able to...	Mark:
C11: LineInt. Compute and apply line integrals.	
4/4 ⋆ reattempt due on:	

Calculate $\int_C \langle y, 2x\rangle \cdot \mathbf{T}\, ds$ where C is the parabolic arc $y = x^2$ from $\langle -1, 1\rangle$ to $\langle 2, 4\rangle$.

Name:	Exercise Type:
J#:	**Quiz**
Date: **2017 July 21**	

Standard: This student is able to...	Mark:
C12: FundThmLine. Apply the Fundamental Theorem of Line Integrals.	
3/4 ⋆ reattempt due on:	

Compute the work done by the force vector field $\langle 2xyz + 3z^2, x^2z, 6xz + x^2y\rangle$ along any path that begins and ends at the same point.

Name:	Exercise Type:
J#:	**Quiz**
Date: **2017 July 20**	

Standard: This student is able to... **S09: ParamSurf.** Parametrize surfaces in three-dimensional Euclidean space. 2/3 ⋆ reattempt due on:	Mark:

Use the cylindrical coordinate transformation $\mathbf{c}(r,\theta,z)=\langle r\cos\theta, r\sin\theta, z\rangle$ to find a parametrization $\mathbf{r}(r,\theta)$ for the conical surface $z=\sqrt{x^2+y^2}$ inside the cylinder $x^2+y^2=25$. You may orient this surface however you like, but make sure to give appropriate bounds for r,θ.

Name:	Exercise Type:
J#:	**Quiz**
Date: **2017 July 20**	

Standard: This student is able to...	Mark:
S10: SurfInt. Compute and apply surface integrals.	
1/3 ⋆ reattempt due on:	

The function $\mathbf{r}(x,y)=\langle x,y,x^2+y^2\rangle$ parametrizes the elliptical paraboloid $z=x^2+y^2$. Give a double iterated integral equal to the area of this surface where $0\leq x\leq 3$ and $0\leq y\leq 3$. (Do not simplify or solve this integral.)