List of quizzes in Math 323-09

Hoping I didn't forget any. This mainly includes quizzes that were collected.

Quiz 1. (M 2/1) Find a vector perpendicular to the plane through $P(4,1,6)$, $Q(4,-2,-1)$, and $R(-1,1,1)$.

Quiz. (W 2/10?) (Not collected.) Let $\mathbf{r}(t) = \langle t^3, \ln(3-t), \sqrt{t}\rangle$.
(a) Find the domain of $\mathbf{r}$.
(b) Find a tangent vector at $t = 2$.

Quiz 2. (F 2/26) Let $f(x,y) = g(\sin(x+y), e^{xy})$,where $g(u,v)$ satisfies $\dfrac{\partial g}{\partial u} = 3$ and $\dfrac{\partial g}{\partial v} = 19$. Find $\dfrac{\partial f}{\partial x}(0,0)$ and $\dfrac{\partial f}{\partial y}(0,0)$.

Quiz 3. (F 4/15) Let $\mathbf{F}(x,y,z) = \langle y^2, 2xy + e^{3z}, 3ye^{3z}\rangle$. Find $f(x,y,z)$ such that $\nabla f = \mathbf{F}$.

Quiz 4. (W 4/20) Use Green's Theorem to evaluate $\int_C \mathbf{F}\cdot d\mathbf{r}$, where $\mathbf{F} = x^2y^2\mathbf{i} + xy^3\mathbf{j}$ and C is the boundary curve of the triangle whose vertices are $(1,0), (0,2), (-1,0)$, traversed counterclockwise from $(1,0)$ back to $(1,0)$.

Quiz 5. (Th 4/28) (Trigonometric Values) Fill in this table.

θ	$\sin\theta$	$\cos\theta$	$\tan\theta$
0			
$\pi/4$			
$5\pi/6$			
$-3\pi/4$			
$-82\pi/3$			
11π			

Quiz. (Th 4/28) (Not collected.) Find $\dfrac{\partial}{\partial x} x\cos xy$. (One purpose was to make sure you know $\cos xy$ means the cosine of xy, not y times the cosine of x.)

Quiz 6. (Th 4/28) Use Green's Theorem to evaluate $\int_C \mathbf{F}\cdot d\mathbf{r}$, where $\mathbf{F} = \langle y - \cos y, x\sin y\rangle$ and C is $(x-3)^2 + (y+4)^2 = 4$, oriented clockwise. (An important hint was to graph the curve first!)