MAP 4175 / 5177   Name:_____

Test 8   Date: October 24, 2018

Each problem is worth 10 points. Show all work for full credit, and use correct notation. Simplify answers completely. See other side for additional problems.

1. Given $\mu_x = 0.02$, $\mu_y = 0.03$, and $\mu_{xy} = 0.04$, determine $_{10}q_{\overline{xy}}$

2. Determine the value of $T_{\overline{xy}}$ if $T_x + T_y = 26.3$ and $T_x T_y = 172.5$.

3. Given $\overset{o}{e}_{30:\overline{10|}} = 9$, $\overset{o}{e}_{40:\overline{10|}} = 8.75$, and $\overset{o}{e}_{30:\overline{20|}} = 16$, determine $_{10}q_{30}$.

4. Given $q_{60} = 0.04$ and $e_{61} = 17.5$, determine e_{60}.

5. Given $_tp_{xy} = (1.05)^{-t}$, determine $e_{xy:\overline{10|}}$