

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  $\mu_{\overline{xy}} = 0.01$ , determine  ${}_{10}q_{xy}$

2. Given  $\mu_x = 0.10$ , determine  ${}^o e_{x:\overline{10}|}$

3. Given  ${}_t p_{\overline{xy}} = (1.04)^{-t}$ , determine  $e_{\overline{xy}:\overline{20}|}$

