

MATE 3063 assignment 5: set 14.5

- 1.(a-d) Choose four of exercises 1–12 of text. The answer must be expressed in terms of the initial variables (s or t).
- 2.(a,b) Exercises 14, 16.
- 3.(a,b) Choose two of exercises 17–20.
4. Find the partial derivatives z_x, z_y :
 - (a) $z = \frac{u}{u + 2v}$, $u = x\sqrt{y}$, $v = y\sqrt{x}$.
 - (b) $z = \sqrt{u^2 + v^2}$, $u = e^x \cos y$, $v = e^{xy}$.
- 5–7. 35, 39, 43 of text.
8. Choose one of problems 45, 48, 49 of text.