

Correction to example

Find the domain of $f(x,y) = x\sqrt{1-\frac{1}{y}}$

unless

• Not defined if $y \neq 0$

• $1 - \frac{1}{y} \geq 0$

i.e. $1 \geq \frac{1}{y}$ - two cases depending on the sign of y .

$(y > 0)$

$(y < 0)$

$y \geq 1$

$y \leq -1$



$\{y > 1\}$

$\{y < -1\}$

So the domain is

$D = \{(x,y) \mid y \geq 1 \text{ or } y < -1\}$

