## An Internet Book on Fluid Dynamics

## Problem 114B

Velocity components in a fluid are given by

$$
\begin{aligned}
u & =\frac{-2 x y z}{\left(x^{2}+y^{2}\right)^{2}} \\
v & =\frac{\left(x^{2}-y^{2}\right) z}{\left(x^{2}+y^{2}\right)^{2}} \\
w & =\frac{y}{\left(x^{2}+y^{2}\right)}
\end{aligned}
$$

Is the fluid incompressible?

