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x̂ – momentum: $$\frac{\partial \overline{\rho v_x}}{\partial t} + \frac{\partial \overline{\rho v_x v_z}}{\partial z} = 0$$

re-write as: $$\frac{\partial \overline{\rho v_x}}{\partial t} = -\frac{\partial \overline{\tau_{xz}}}{\partial z}$$

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diffusion equation:

$$\frac{\partial \overline{\rho v_x}}{\partial t} = \frac{\partial}{\partial z} D_{turb} \frac{\partial \overline{\rho v_x}}{\partial z}$$