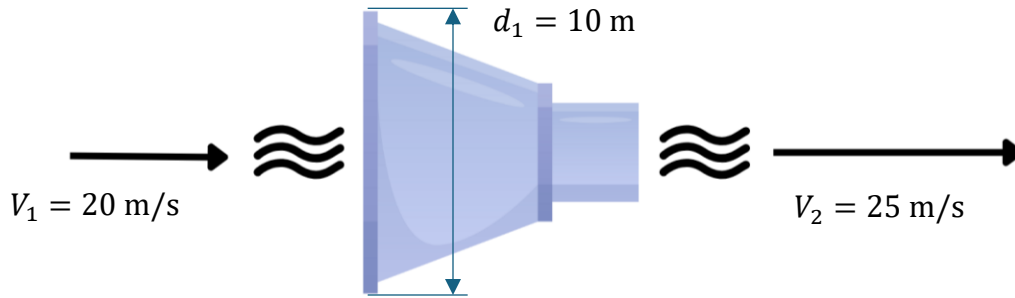


### (EXAMPLE) [A-3-3]



From **(EXAMPLE) [A-3-1]**, consider the same convergent circular duct with an inlet diameter:  $d_1 = 10 \text{ m}$ . Air enters this duct with a velocity:  $V_1 = 20 \text{ m/s}$  and exits the duct with a velocity:  $V_2 = 25 \text{ m/s}$ . If the air pressure at the inlet is:  $p_1 = 1 \text{ atm}$  (standard sea-level), what is the corresponding outlet pressure of the duct:  $p_2$ ?

Suppose, if the inlet and outlet velocities become:  $V_1 = 200 \text{ m/s}$  and  $V_2 = 250 \text{ m/s}$ , respectively, will the similar analysis still apply?

Lined area for notes, consisting of multiple horizontal dashed lines.