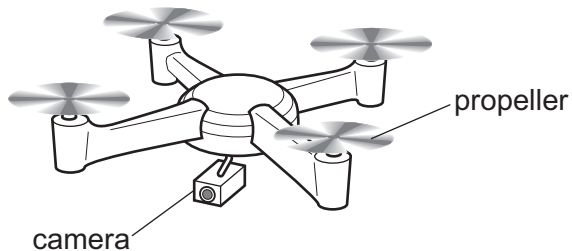


- 7 A camera drone of mass  $1.20\text{ kg}$  hovers at a fixed point above the ground. The drone has four propellers.



In a time of  $1.00\text{ s}$ , each propeller pushes a mass of  $0.400\text{ kg}$  of air vertically downwards.

Assume that the air above the propellers is stationary.

What is the speed of the air leaving each propeller?

- A**  $0.750\text{ ms}^{-1}$       **B**  $3.00\text{ ms}^{-1}$       **C**  $7.36\text{ ms}^{-1}$       **D**  $29.4\text{ ms}^{-1}$