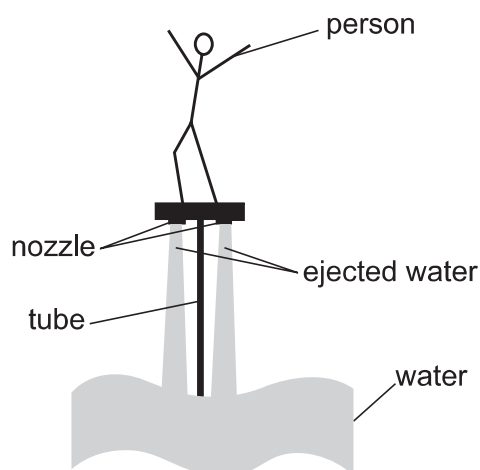


- 23 A water jet pack has lifted a person vertically upwards, as shown in the sketch. He is now stationary at a constant height.



Water rises through the tube and is ejected at a speed of 15 m s^{-1} through two nozzles.

In a time of 12 s, each of the nozzles ejects 400 kg of water vertically downwards.

What is the momentum of the water ejected by **each** nozzle in 12 s, and what is the upward force due to the water ejected by the jet pack?

	<i>momentum / kg m s⁻¹</i>	<i>force / N</i>
A	6000	1000
B	6000	2000
C	12 000	1000
D	12 000	2000
E	45 000	3750
F	45 000	7500
G	90 000	7500
H	90 000	15 000