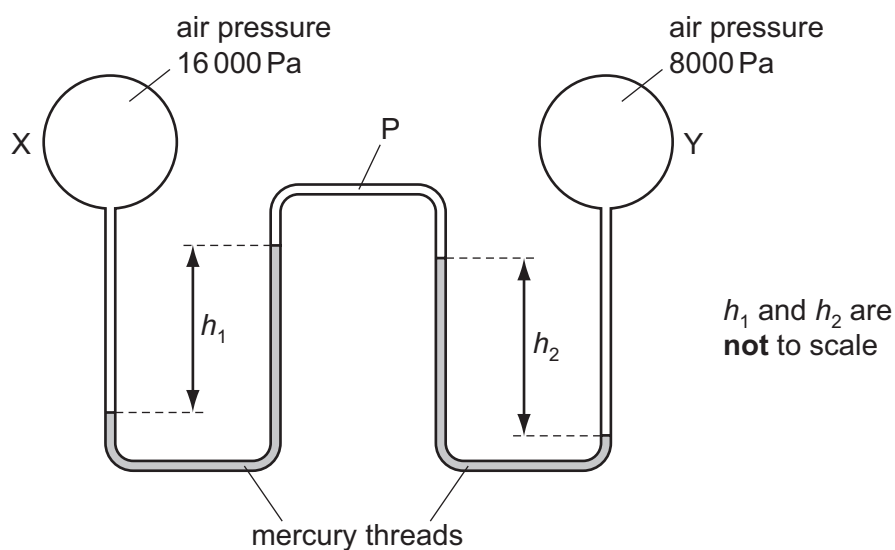


- 20 Two bulbs X and Y containing air at different pressures are connected by a tube P which contains two mercury threads.



The density of mercury is  $13\,600\text{ kg m}^{-3}$ .

Which pair of values of  $h_1$  and  $h_2$  is possible?

	$h_1/\text{cm}$	$h_2/\text{cm}$
<b>A</b>	4.0	2.0
<b>B</b>	6.0	6.0
<b>C</b>	12.0	18.0
<b>D</b>	18.0	12.0

- 21 What is the unit of the Young modulus?

**A**  $\text{Nm}^{-1}$       **B**  $\text{Nm}$       **C**  $\text{Nm}^{-2}$       **D**  $\text{Nm}^2$

Space for working