

- 6 A graph of red shift against distance in metres was plotted for a range of nearby galaxies. The value of the gradient of the graph was  $5.4 \times 10^{-27}$

Which of the following expressions gives a value for the Hubble constant in  $\text{s}^{-1}$ ?

- ☐ A  $5.4 \times 10^{-27}$
- ☐ B  $\frac{3 \times 10^8}{5.4 \times 10^{-27}}$
- ☐ C  $\frac{1}{3 \times 10^8 \times 5.4 \times 10^{-27}}$
- ☐ D  $3 \times 10^8 \times 5.4 \times 10^{-27}$

(Total for Question 6 = 1 mark)