

22 Some information about two dilute acids is shown.

dilute acid	acid concentration in mol/dm <sup>3</sup>	pH
nitric acid	0.1	1.0
propanoic acid	0.4	2.6

Three statements about the acids are listed.

- 1 Nitric acid has a lower pH because it dissociates more than propanoic acid.
- 2 Propanoic acid has a lower concentration of hydrogen ions than nitric acid.
- 3 Propanoic acid has a higher pH because it has a higher concentration.

Which statements are correct?

**A** 1 and 2

**B** 1 and 3

**C** 2 only

**D** 3 only