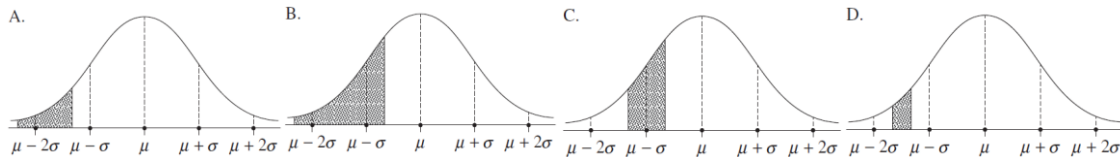


20 MA **9** Suppose the weight of melons is normally distributed with a mean of μ and a standard deviation of σ . **1**

A melon has a weight below the lower quartile of the distribution but NOT in the bottom 10% of the distribution.

Which of the following most accurately represents the region in which the weight of this melon lies?



C

Below the lower quartile means in the bottom 25%.

Consider the percentage of scores less than $\mu - \sigma$: $\frac{100\% - 68\%}{2} = 16\%$.

Consider the percentage of scores less than $\mu - 2\sigma$: $\frac{100\% - 95\%}{2} = 2.5\%$.

This means the best representation is C.

State Mean:
0.55/1

* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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