

## Normal Distribution - Short Questions

- 1 95% of students at school weigh between 62 kg and 90 kg. Assuming this data is normally distributed, what are the mean and standard deviation?
- 2 A machine produces electrical components. 99.7% of the components have lengths between 1.176 cm and 1.224 cm. Assuming this data is normally distributed, what are the mean and standard deviation?
- 3 68% of the marks in a test are between 51 and 64 Assuming this data is normally distributed, what are the mean and standard deviation?

- ① The Fresha Tea Company pack tea in bags marked as 250 g. A large number of packs of tea were weighed and the mean and standard deviation were calculated as 255 g and 2.5 g respectively. Assuming this data is normally distributed, what percentage of packs are underweight?
- ② Students pass a test if they score 50% or more. The marks of a large number of students were sampled and the mean and standard deviation were calculated as 42% and 8% respectively. Assuming this data is normally distributed, what percentage of students pass the test?