

12 A student takes measurements to calculate the density of a liquid in a beaker.

The height of the liquid in the beaker is $0.20\text{ m} \pm 2\%$.

The internal diameter of the beaker is $0.05\text{ m} \pm 3\%$.

The mass of the liquid is $0.36\text{ kg} \pm 10\%$.

What is the percentage uncertainty in the calculated density of the liquid?

A 2%

B 5%

C 15%

D 18%