

1 What represents a physical quantity?

- A 3.0
- B kilogram
- C 7.0 N
- D 40%

2 The relationship between the variables D and T is given by the equation

$$\frac{1}{T} = \frac{b}{\sqrt{D}} + c$$

where b and c are constants.

The unit of D is m^2 and the unit of T is s.

What are the units of b and c ?

	unit of b	unit of c
A	ms	s
B	ms^{-1}	s^{-1}
C	m^{-1}s	s
D	$\text{m}^{-1}\text{s}^{-1}$	s^{-1}

3 A hollow cylinder, which is open at both ends, has a radius of $(3.0 \pm 0.1)\text{cm}$ and a length of $(15.0 \pm 0.1)\text{cm}$.

What is the value, with its absolute uncertainty, of the surface area of the cylinder?

- A $(280 \pm 10)\text{cm}^2$
- B $(282.7 \pm 0.2)\text{cm}^2$
- C $(420 \pm 30)\text{cm}^2$
- D $(424.1 \pm 0.3)\text{cm}^2$