

20 A solid right circular cone is made of brass.

The mass of the cone is 5080 grams, to the nearest 10 grams.

The radius of the base of the cone is 8.5 cm, to 2 significant figures.

The density of the brass is 8.73 g/cm³, to 3 significant figures.

Given that

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$

and taking the value of π as 3.142

calculate the upper bound of the height of the cone.

Give your answer to one decimal place.

..... cm

(Total for Question 20 is 4 marks)

