21 A solid shape is made by joining two cones.
Each cone has the same radius.

$\begin{array}{ll}\text { One cone has } & \text { slant height }=2 \times \text { radius } \\ \text { The other cone has } & \text { slant height }=3 \times \text { radius }\end{array}$
The total surface area of the shape is $57.8 \pi \mathrm{~cm}^{2}$

Curved surface area of a cone $=\pi r l \quad$ where $r$ is the radius and $l$ is the slant height
Work out the radius.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Answer $\qquad$ cm
$\qquad$

