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| **Geometry Revision**  | **5** |
| **(a)** | **(b)** | **(c)** | **(d)** |
| A metal cube of side length $8 cm$. The density of the metal is $7.48 g/cm^{3}$. Find the mass of the metal cube.  | On the grid, enlarge shape A by a scale factor of $2$ about centre $(1, 2)$ | The diagram shows three regular pentagons joined together. Work out the value of angle $x$. | Work out the missing length $x$. |
| **(e)** | **(f)** | **(g)** | **(h)** |
| (i) Convert $4500 cm^{2}$ into $m^{2}$(ii) Convert $0.085 cm^{3} $into $mm^{3}$ | $$\vec{OA}=\left(\begin{matrix}4\\3\end{matrix}\right) \vec{OB}=\left(\begin{matrix}-2\\7\end{matrix}\right)$$Find $\vec{AB}$ as a column vector | Work out the size of angle $x$. Give reasons for your answer. | The total surface area of the hemisphere is equal to the total surface area of the cylinder. Find the height $h$. |