**Harder Similar Areas and Volumes**



(a) The area of A is $20 cm^{2} $and the area

 of B is $180 cm^{2}$. Find $x$.



(b) The volume of C is $5 cm^{3} $and the volume of D is $320 cm^{2}$. Find $x$.



(c) The surface area of E is $15 cm^{2}$ and the surface area of F is $60 cm^{2}$. If the volume of E is $27 cm^{3}$, find the volume of F.



(d) The volume of G is $4 cm^{3}$ and the volume of H is $171.5 cm^{3}$. If the surface area of H is $122.5 cm^{2}$, find the surface area of G.

(e) If a painting with area of $220 cm^{2}$ has a diagonal length of $21 cm$, what will be the diagonal length of a similar painting with area $350 cm^{2}$?

(f) It takes 5.6 litres of paint to paint a tower that is 3 m high. What is the tallest similar tower that can be painted with 8 litres of paint?

(g) A bronze statue has a mass of 300g and a height of 9 cm. A similar statue has a mass of 2 kg. What is its height?

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