Harder Similar Areas and Volumes

(a) The area of $A$ is $20 \mathrm{~cm}^{2}$ and the area of B is $180 \mathrm{~cm}^{2}$. Find $x$.

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

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

(d) The volume of G is $4 \mathrm{~cm}^{3}$ and the volume of H is $171.5 \mathrm{~cm}^{3}$. If the surface area of H is $122.5 \mathrm{~cm}^{2}$, find the surface area of G.
(e) If a painting with area of $220 \mathrm{~cm}^{2}$ has a diagonal length of 21 cm , what will be the diagonal length of a similar painting with area $350 \mathrm{~cm}^{2}$ ?
(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 300 g and a height of 9 cm . A similar statue has a mass of 2 kg . What is its height?

Harder Similar Areas and Volumes

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

(d) The volume of G is $4 \mathrm{~cm}^{3}$ and the volume of H is $171.5 \mathrm{~cm}^{2}$. If the surface area of H is $122.5 \mathrm{~cm}^{3}$, find the surface area of G.
(e) If a painting with area of $220 \mathrm{~cm}^{2}$ has a diagonal length of 21 cm , what will be the diagonal length of a similar painting with area $350 \mathrm{~cm}^{2}$ ?
(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 300 g and a height of 9 cm . A similar statue has a mass of 2 kg . What is its height?

