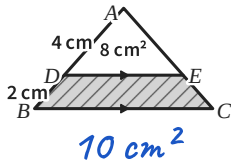
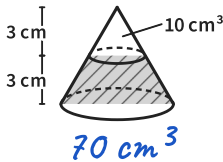


Similar Shapes: Area and Volume *ramp up*

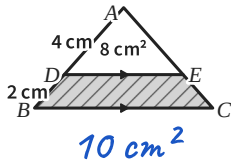
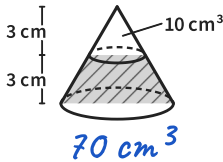
ANSWERS

a An area of 12 cm^2 is enlarged by scale factor 1.5. Find the new area. 27 cm^2 a decimal scale factor squared	b Small surface area 80 cm^2. Heights 6 cm and 9 cm. Find the large surface area. 180 cm^2 surface area: an area too	c Length scale factor 5. Large volume 500 cm^3. Find the small volume. 4 cm^3 back down: divide by the cube	d An area of 72 cm^2 is enlarged by scale factor $\frac{2}{3}$. Find the new area. 32 cm^2 a scale factor less than 1
e Heights 10 cm and 15 cm. Small volume 400 cm^3. Find the large volume. 1350 cm^3 a decimal scale factor cubed	f Areas are in the ratio 9 : 49. Find the ratio of the lengths. $3 : 7$ lengths from a ratio of areas	g Volumes are in the ratio 27 : 64. Find the ratio of the surface areas. $9 : 16$ areas from a ratio of volumes	h Volumes are 16 cm^3 and 54 cm^3. The small height is 6 cm. Find the large height. 9 cm a length from two volumes
i Volumes 8 : 125. The small surface area is 12 cm^2. Find the large one. 75 cm^2 an area from two volumes	j The lengths increase by 20%. By what percentage does the area increase? 44% a percentage change in length	k Find the shaded area  10 cm^2 the area of the part left over	l Find the shaded volume  70 cm^3 the volume of the part left over

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