Deverta		
DENSIL	Examine: only Arholwr	E
A metal bar has a uniform cross-section in the shape of a trapezium <i>ABCD</i> .	2	53-1cm 53-1cm 8 24-7cm 16-3cm
<i>Diagram not drawn to scale.</i> The area of the cross-section of the metal bar is 48.7 cm ² . It is 12.8 cm long and has a mass of 3.2 kg. Calculate the density of the metal from which the bar is made, giving your answer in g/cm ³ .	· ·	P P Diagram not drawn to scale. The diagram shows a cuboid of length 53·1 cm. The cross-section, PQRS, is such that PR = 24.7 cm and $QR = 16.3$ cm. (a) Calculate the length of PQ.
[4]		[3] (b) The density of the material from which the cuboid is made is 4.3 g/cm ³ . Calculate the mass of the cuboid in kilograms.
		[3] Turn over.