a) A cuboidal container, as si first diagram, is filled with depth of 16cm, and sealed The container is then rota shown in the second diago What is the depth of the w in the container in the sec diagram?	hown in the n water to a l. ted as ram. vater ond 16 cm 12 cm 10 cm 12	<ul> <li>b)</li> <li>A cuboidal container, as slifirst diagram, is filled with depth of 12cm, and sealed</li> <li>The container is then rota shown in the second diagram</li> <li>What is the depth of the win the container in the second diagram?</li> </ul>	hown in the n water to a l. ted as ram. 12cm 12cm 3cm
What is the volume of water in the sealed container?	12cm × $10$ cm × $16$ cm = $1920$ cm <sup>3</sup>	What is the volume of water in the sealed container?	8cm × 6cm × 12cm = 576cm <sup>3</sup>
Allow the depth of the water in the second diagram to be <i>x</i> . How can we express the volume of the water?	20cm × $10$ cm × $x$ cm = $200x$ cm <sup>3</sup>	Allow the depth of the water in the second diagram to be <i>x</i> . How can we express the volume of the water?	16cm × $6$ cm × $x$ cm = $96x$ cm <sup>3</sup>
Has the volume of water changed? $200x \text{ cm}^3 = 1920 \text{ cm}^3$		Has the volume of water changed?	
What is the depth of the water, <i>x</i> ? $x = \frac{1920}{200} = 9.6$ cm		What is the depth of the water, <i>x</i> ?	
	BACKWARD	FADED MATHS	

<ul> <li>c) A cuboidal container, as sh first diagram, is filled with depth of 12cm, and sealed.</li> <li>The container is then rotat shown in the second diagra</li> <li>What is the depth of the wa in the container in the second diagram?</li> </ul>	own in the water to a $12 \text{ cm}$ $18 \text{ cm}$ red as am. $12 \text{ cm}$ $10 \text{ cm}$ $10 \text{ cm}$ $10 \text{ cm}$	<ul> <li>d) A cuboidal container, as shown in the first diagram, is filled with water to a depth of 5cm, and sealed.</li> <li>The container is then rotated as shown in the second diagram.</li> <li>What is the depth of the water in the container in the second diagram?</li> </ul>	20cm 5cm 15cm 10cm 15cm 15cm
What is the volume of water in the sealed container?	10cm × 5cm × $12$ cm = $600$ cm <sup>3</sup>		
Allow the depth of the water in the second diagram to be <i>x</i> . How can we express the volume of the water?			
Has the volume of water changed?			
What is the depth of the water, <i>x</i> ?			
	BACKWARD	FADED MATHS	