

0	Three tubs are brimful with ice-cold water. Each has an iceberg floating in it. In tub A, the berg has a large air bubble. In tub W, the berg has some unfrozen water inside it. In tub M, the berg has a heavy metal rod inside it. What happens to the water level in each of the three tubs when the icebergs melt?		
	<table border="1"> <tr> <td>H: M gets lower, W and A stay the same to a good approximation</td> <td>D: M gets lower, the water in A gets lower, and W spills over</td> </tr> </table>	H: M gets lower, W and A stay the same to a good approximation	D: M gets lower, the water in A gets lower, and W spills over
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1	If there was an iceberg filled with oil, would the water level decrease when it melted?		
	<table border="1"> <tr> <td>H: 40%</td> <td>D: 90%</td> </tr> </table>	H: 40%	D: 90%
H: 40%	D: 90%		

11	Can we calculate the water level change by calculating [displaced vol - melted vol]?		
	<table border="1"> <tr> <td>H: 60%</td> <td>D: 95%</td> </tr> </table>	H: 60%	D: 95%
H: 60%	D: 95%		

12	For a berg filled with oil, is [displaced vol - melted vol] < 0, meaning the water level decreases?		
	<table border="1"> <tr> <td>H: 60%</td> <td>D: 95%</td> </tr> </table>	H: 60%	D: 95%
H: 60%	D: 95%		

13	Is there anything that affects the water level except initial water vol, displaced vol, and melted vol?		
	<table border="1"> <tr> <td>H: 30%</td> <td>D: 4%</td> </tr> </table>	H: 30%	D: 4%
H: 30%	D: 4%		

14	Conditioned on 13=No, is the change in water level expressed as [initial water vol + melted vol - (initial water vol + displaced vol)]?		
	<table border="1"> <tr> <td>H: 80%</td> <td>D: 98%</td> </tr> </table>	H: 80%	D: 98%
H: 80%	D: 98%		

15	Is the buoyancy in air negligible in this case?		
	<table border="1"> <tr> <td>H: 70%</td> <td>D: 97%</td> </tr> </table>	H: 70%	D: 97%
H: 70%	D: 97%		

16	Conditioned on 15=Yes, is there some water that's displaced by the oil that's not replaced after melting, meaning the water level decreases?		
	<table border="1"> <tr> <td>H: 75%</td> <td>D: 98%</td> </tr> </table>	H: 75%	D: 98%
H: 75%	D: 98%		

5	If you changed the oil to air, does [total mass - buoyancy in air] increase?		
	<table border="1"> <tr> <td>H: 65%</td> <td>D: 98%</td> </tr> </table>	H: 65%	D: 98%
H: 65%	D: 98%		

6	If you changed the oil to air, does melted vol increase?		
	<table border="1"> <tr> <td>H: 15%</td> <td>D: 1%</td> </tr> </table>	H: 15%	D: 1%
H: 15%	D: 1%		

7	Conditioned on this, would [displaced vol - melted vol] increase?		
	<table border="1"> <tr> <td>H: 85%</td> <td>D: 99%</td> </tr> </table>	H: 85%	D: 99%
H: 85%	D: 99%		

8	Does 'conditioned on 3=Yes' mean that A has greater [displaced vol - melted vol] than some setup O where the water level decreases?		
	<table border="1"> <tr> <td>H: Yes</td> <td>H: Yes</td> </tr> </table>	H: Yes	H: Yes
H: Yes	H: Yes		

9	Are there any other significant differences between A and O?		
	<table border="1"> <tr> <td>H: 40%</td> <td>D: 3%</td> </tr> </table>	H: 40%	D: 3%
H: 40%	D: 3%		

10	Conditioned on 8=Yes and 9=No, does the water level in A decrease?		
	<table border="1"> <tr> <td>H: 80%</td> <td>D: 99%</td> </tr> </table>	H: 80%	D: 99%
H: 80%	D: 99%		

2	Conditioned on 1=Yes, does the water level in A decrease?		
	<table border="1"> <tr> <td>H: 50%</td> <td>D: 95%</td> </tr> </table>	H: 50%	D: 95%
H: 50%	D: 95%		

3	If you changed the oil to air, would 'displaced vol - melted vol' increase?		
	<table border="1"> <tr> <td>H: 50%</td> <td>D: 97%</td> </tr> </table>	H: 50%	D: 97%
H: 50%	D: 97%		

4	Conditioned on 3=Yes, does the water level in A decrease?		
	<table border="1"> <tr> <td>H: 50%</td> <td>D: 97%</td> </tr> </table>	H: 50%	D: 97%
H: 50%	D: 97%		