

2018 IMSO Answers

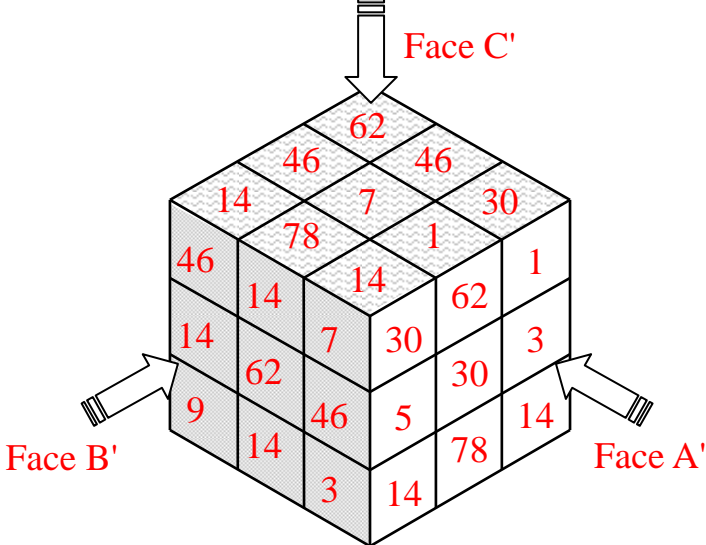
SHORT ANSWER

1.	$7\frac{1}{3} = \frac{22}{3}$	2.	32	3.	100900	4.	17	5.	10005																																																		
6.	46	7.	28	8.	6	9.	0	10.	15																																																		
11.	558	12.	483	13.	1	14.	86	15.	27																																																		
16.	180°	17.	1	18.	4038	20.	16	21.	13																																																		
19.	<table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>9</td><td>-</td><td>5</td><td>=</td><td>4</td></tr> <tr style="background-color: #cccccc;"><td></td><td></td><td></td><td></td><td>×</td></tr> <tr><td>6</td><td>÷</td><td>3</td><td>=</td><td>2</td></tr> <tr style="background-color: #cccccc;"><td></td><td></td><td></td><td></td><td>=</td></tr> <tr><td>7</td><td>+</td><td>1</td><td>=</td><td>8</td></tr> </table> <table border="1" style="display: inline-table;"> <tr><td>9</td><td>-</td><td>5</td><td>=</td><td>4</td></tr> <tr style="background-color: #cccccc;"><td></td><td></td><td></td><td></td><td>×</td></tr> <tr><td>6</td><td>÷</td><td>3</td><td>=</td><td>2</td></tr> <tr style="background-color: #cccccc;"><td></td><td></td><td></td><td></td><td>=</td></tr> <tr><td>1</td><td>+</td><td>7</td><td>=</td><td>8</td></tr> </table>					9	-	5	=	4					×	6	÷	3	=	2					=	7	+	1	=	8	9	-	5	=	4					×	6	÷	3	=	2					=	1	+	7	=	8	22.	13	23.	8
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24.	288	25.	12																																																								

ESSAY PROBLEMS

1.	96	2.	2025	3.	(3, 4, 5), (5, 12, 13)	4.	15	5.	145
6.	1480	7.	5	8.	4	9.	321654, 123654	10.	32
11.	9	12.	90	13.	512				

EXPLORATION PROBLEMS

1.	$\boxed{4} + \boxed{5} \boxed{6} \div \boxed{7} = \boxed{1} \boxed{2}$ $\boxed{5} + \boxed{6} \boxed{3} \div \boxed{7} = \boxed{1} \boxed{4}$ $\boxed{3} + \boxed{5} \boxed{4} \div \boxed{6} = \boxed{1} \boxed{2}$ $\boxed{3} + \boxed{7} \boxed{2} \div \boxed{6} = \boxed{1} \boxed{5}$ $\boxed{7} + \boxed{3} \boxed{2} \div \boxed{4} = \boxed{1} \boxed{5}$ $\boxed{3} + \boxed{5} \boxed{2} \div \boxed{4} = \boxed{1} \boxed{6}$ $\boxed{3} + \boxed{5} \boxed{6} \div \boxed{4} = \boxed{1} \boxed{7}$ $\boxed{7} + \boxed{5} \boxed{6} \div \boxed{4} = \boxed{2} \boxed{1}$		
2.	(a)	 <p>The total sum of the numbers on the faces A', B', C' is 750</p>	
(b)		The total sum of the numbers on the faces of all the unit cubes is 2655	
3.	Complete figure	Red pentagon	Blue pentagon
