January

Name: _____

Date: _____

Joshua's teacher asked him to add the fractions $\frac{1}{4}$, $\frac{1}{6}$, and $\frac{5}{12}$, but his teacher told him his answer was incorrect. He knows that in order to add fractions with unlike denominators, he has to find a common denominator and then add the numerators only. His work is shown below:

$$\frac{\frac{1}{4} + \frac{1}{6} + \frac{5}{12}}{\frac{1+1+5}{12}}$$
$$\frac{\frac{7}{12}}{\frac{7}{12}}$$

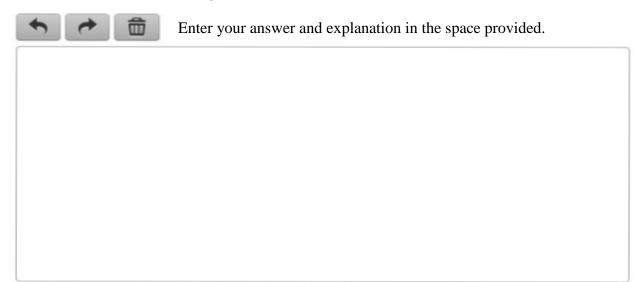
PART A

Explain the mistake that Joshua made.

*	Enter your answer in the space provided.		

PART B

Find the correct value of $\frac{1}{4} + \frac{1}{6} + \frac{5}{12}$. Show your work or explain your answer.



ANSWER KEY

Rubric Part A				
Score Description				
	1	Student response includes th	ne following components:	
		 Reasoning component Student correct 	nt = 1 point ectly explains Joshua's mistake.	
		fractions into like fractions.	e equivalent fractions when converting all He only changed the denominator of each ange the numerators correctly. $\frac{1}{4}$ would become	
	0	Student response is incorrect	t or irrelevant	
0 Student response is incorrect or irrelevant. Rubric Part B				
Score	2	Description Student response includes th	e following components:	
		 Computation component = 1 point Correct answer, ¹⁰/₁₂ or other equivalent fraction. Reasoning component = 1 point Student correctly shows work and/or explains answer. Sample Student Response: "The correct answer is ¹⁰/₁₂ because ¹/₄ + ¹/₆ + ⁵/₁₂ would be changed into ³/₁₂ + ²/₁₂ + ⁵/₁₂ = ¹⁰/₁₂." OR other valid explanation. 		
	1	Student response includes 1 of the above elements.		
	0	Student response is incorrect or irrelevant.		
		Glow	Grow	