Timed Extended Construction Response (ECR) Task—Grade 7 November

Name: _____ Date: _____

The table represents a proportional relationship.

x	*y*
6	7.5
8	10.0
10	12.5

A student states that the constant of proportionality is 2.5 since 10 – 7.5 = 2.5.

- Explain why the student's reasoning is incorrect.
- Find the correct constant of proportionality. Show your work or explain your answer.

Enter your explanations, your answer, and your work in the space provided.

ANSWER KEY

Rubric	
Score	**Description**

3	Student response includes the following 3 elements.
	
	• Computation component = 1 point
	  ○ Correctly determines the constant of proportionality as 1.25 or equivalent
	
	• Reasoning component = 2 points
	  ○ Correctly explains why the student's reasoning is incorrect
	  ○ Correct work or explanation for calculating the constant of proportionality
	
	Sample Student Response:
	The student's reasoning is incorrect because he or she used subtraction between only one quantity to find the constant of proportionality. Since the table is proportional, the ratio between the y and x values will be the same. This will be the constant of proportionality.
	
	$y/x = 10/8 = 1.25$
	$y/x = 7.5/6 = 1.25$
	
	The constant of proportionality is 1.25.
	
	Note: One example of correct work is sufficient for credit.

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Glow	Grow