

Shapes and Numbers

Some shapes are same numbers.

$$\square + 2 = 6 \quad \square + \triangle = 10$$

1. What is \square ? _____

2. What is \triangle ? _____

3. What is $\square + \square$? _____

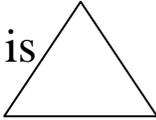
[Source: Connecticut State Department of Education Performance Task on the website: ctcurriculum.org.]

Name: _____

SHAPES AND NUMBERS RECORDING SHEET

Give the student the worksheet to complete. Ask the student to explain how he/she figured out the answer to each question. After their answer is recorded ask, “How do you know that’s the answer?” or “How did you figure that out?” Record the responses below.

1. What is  ?

2. What is  ?

3. What is  +  ?

[Source: Connecticut State Department of Education Performance Task on the website: ctcurriculum.org.]

A.107

ANALYTIC RUBRIC – SHAPES AND NUMBERS

Core Elements	4 “Strong Evidence”	3 “Moderate Evidence”	2 “Limited Evidence”	1 “No Evidence”
Replace variables with numbers in equations	<ul style="list-style-type: none"> Selects the correct number for the square and the triangle. 	<ul style="list-style-type: none"> Selects correct digit for square and triangle with some self-correction. 	<ul style="list-style-type: none"> Many mistakes in determining digits to replace variables square, triangle. 	<ul style="list-style-type: none"> Unable to determine digits to replace variables.
Identify relationship between variables	<ul style="list-style-type: none"> Explanation tells how the student knows the square is 4 and how that helps find the value for the triangle. 	<ul style="list-style-type: none"> Although student identifies the square as 4, does not relate to the "doubles" $4+4=8$. 	<ul style="list-style-type: none"> Able to give some explanation but understanding was unclear relating to the equation. 	<ul style="list-style-type: none"> Unable to explain.
Explore addition and subtraction using pictorial and symbolic models	<ul style="list-style-type: none"> Recognizes the relationship between addition and subtraction 	<ul style="list-style-type: none"> Recognizes the relationship but uses fingers to generate answer. 	<ul style="list-style-type: none"> Able to recognize addition/subtraction but unable to generate correct answer. 	<ul style="list-style-type: none"> Unable to recognize a relationship between addition and subtraction.

[Source: Connecticut State Department of Education Performance Task on the website: ctcurriculum.org.]