MATH ANNOTATIONS ✳ **SMARTER BALANCED PERFORMANCE TASK**

Focus Standards and Claim	Claim 4
	CCSS.MATH.CONTENT. 3.NF.3.
	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

Stimulus

Clay Pottery

Lizzie and Zela are interested in making pottery. The following chart shows how much clay is needed to make different projects.

Project	Pounds of Clay Needed
Small Plate	$2\frac{1}{2}$
Small Bowl	$1\frac{1}{2}$
Large Bowl	$3\frac{1}{4}$
Dinner Plate	$4\frac{1}{2}$
Mug	$\frac{3}{4}$

Item Prompt	Zela is making a plan to use her 12 pounds of clay. She still wants to make 6 mugs. She also wants to make 6 small bowls.
	Lizzie says: "12 pounds is not enough to make 6 mugs and 6 small bowls. I know because I did the math."
	Zela says: "It is enough if I make the bowls smaller!"
	Make a plan for Zela to use no more than 12 pounds of clay to make 6 mugs and 6 bowls that are **smaller** than the bowls in the chart.
	In the plan, state how much clay she should use for each of her smaller bowls. Her bowls should all be the same size.
	Zela does **not** care about using **exactly** 12 pounds, but she does want to use as much of the clay as possible.

Sample Responses

Sample Response A	She should use 1/3 for each mug and bowl because it is 6 bowls and 6 mugs. Zela is correct because you could use 1/3 of clay.
Sample Response B	1 + 1 + 1 + 1 + 1 = 6 1/2 + 1/2 + 1/2 + 1/2 + 1/2 + 1/2 = 3 Each bowl will need 1 1/4 pounds of clay. That would be under 12 for Zela
Sample Response C	Zela is write because she did the math. Zela does not care about using exactly 12 pounds.
Sample Response D	6 mugs = 4.5 lbs 7.5 lbs of clay left 1.25 + 1.25 + 1.25 + 1.25 + 1.25 + 1.25= 7.5 Zela would have to make six mugs and six bowls that are 1.25 pound each.

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Sample Response E	6 mugs = 4 1/2 7 1/2 pounds left over for the bowls 1 1/4 + 1 1/4 + 1 1/4 + 1 1/4 + 1 1/4 + 1 1/4 = 7 1/4 Zela could need to make the bowls 1/4 smaller so that she could make them so they are 1/4 smaller than 12 pounds. Which could make them 11 3/4 big.
Sample Response F	6 mugs = 4 1/2 12 + 4 1/2 = 7 1/2 pounds 1 + 1 + 1 + 1 + 1 + 1 = 6 1/2 + 1/2 + 1/2 + 1/2 + 1/2 + 1/2 = 3 6 + 3 = 9 bigger 6 mugs=5 pounds 9+5 =14 If Zela doesn't make the bowls smaller she'll get 14 pounds. 12 pounds would be enough is Zela made the bowls smaller. If the bowls were 1 1/4 pounds you could use 12 pounds. Small bowl = 1 1/4 pounds
Sample Response G	I know 1/4 x 6 = 7 1/2 3/4 x 6 = 4 1/2 then I added and got 12.
Sample Response H	.75 + .75 + .75 +.75 +.75 +.75 = 4.50 1.25 + 1.25 +1.25 + 1.25 +1.25 + 1.25 = 7.50 4.50 + 7.50 = 12.00 1.25 for smaller bowls
Sample Response I	She can make the bowls with 1 pound of clay and it will take 6 pounds to make 6. I added 3/4 6 times and got 4 1/2. In the end I added that and the 6 pounds and got 10 1/2 .

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