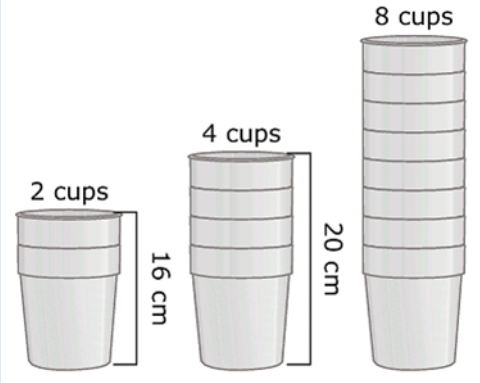


<p>Focus Standards and Claim</p>	<p>Claim 4 7.EE.B.4</p>
<p>Stimulus</p>	<p>Stacks of Cups</p> <p>Your science classroom uses cups for many experiments. Your teacher ordered lots of cups from a catalog. The catalog is not very good. It has the following picture, but no other useful information.</p>  <p>Your teacher wants you to help her get organized for when the cups arrive next week. Using only the information shown in the picture, she asks you to figure out some other specific measurements.</p>
<p>Item Prompt</p>	<p>Your teacher wants to sell School Spirit Cups with your school logo on them. She asks you to design this new cup such that a stack of 10 of them will be 125 cm tall.</p> <p>Describe key measurements of the School Spirit Cups and explain how they will meet your teacher's specifications.</p>

Sample Responses

Sample Response A

1. You tack the measurement of the cups you have right now. Problem 3.
 2. Your add that measurement until you get 125 cm tall. $72 + 53 = 125\text{cm}$
 3. Than find how many cups in a stack will it take to get 125cm
- Your will need 13 cups in a stack of 10 to get 125cm.

Sample Response B

Lip = 8 cm
Base = 45cm

$8 \text{ (lip)} \times 10 \text{ (amount of cups)} = 80$
 $+45 \text{ (base)}$
Height of stack = 125cm

Sample Response C

12×10
 $120 + 5 = 125$

Each cup would have to have a rim that is 12 cm tall and a base that is 5 cm tall.

$12 + 5 = 17$ for one cup.

Sample Response D

Lip = 10cm
Base = 25cm

If the lip of the cup is 10cm and the base is 25cm then 10 cups will equal 125cm.

Sample Response E

The base is 75cm and each cup lip is 5cm it equals 125cm.

Sample Response F

1 cup = 35 height then 2 cups = 45 height then 3 cups = 55 height
I just go up by 10 cm each time after the first one.

Sample Response G	<p>The entire cup is 35 with the lips being 10, when you stack it, there will be a full cup and 9 lips.</p> $h = 35 + 10(n-1)$ $125 = 35 + 10(9)$ $125 = 35 + 90$
Sample Response H	<p>The school logo wants a stack of 10 and 125 cm tall. The call will have 30 cup and 15.750 cm tall.</p>
Sample Response I	<p>If you make the cup 35 cm (base: 25 cm, lip = 10 cm) then you could do 10 cups.</p>
Sample Response J	<p>The lips can be 10 cm and the base can be 25 cm.</p> $125 = b + (10 \times L)$ $125 = 25 + (10 \times 10)$ $125 = 25 + 100$ $125 \text{ cm} = 125 \text{ cm}$ <p>It works!</p>
Sample Response K	<p>They will meet standards if they are made 12.5 cm tall exact.</p>