# Problem of the Week
Problem C
Stacking Bowls

Alice has a set of bowls of various sizes. She likes stacking her bowls upside down. A bowl can be *stacked over* another bowl if the smaller bowl can be completely enclosed by the larger bowl. This means the larger bowl can completely hide the smaller bowl.

For the example below, a bowl with a width of 10 cm and height 10 cm can stack over a bowl with a width of 5 cm and a height of 5 cm. In turn they can be stacked over by a bowl with a width of 20 cm and a height of 20 cm. This gives a single stack.
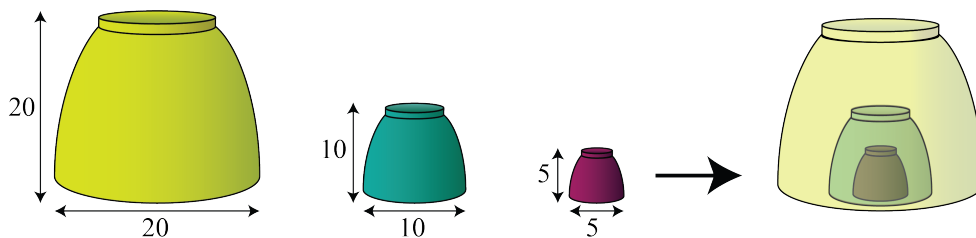
On the other hand, a bowl with a width of 20 cm and a height of 20 cm cannot be stacked over a bowl of a width of 25 cm and a height of 15 cm. Also, a bowl with a width of 25 cm and a height of 15 cm cannot be stacked over a bowl of a width of 20 cm and a height of 20 cm.
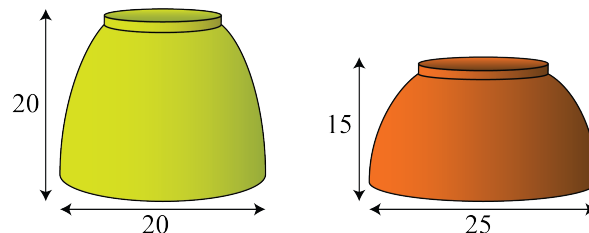
Alice has the following set of bowls and starts stacking them. What is the fewest number of stacks that Alice can have?