**Problem Solving Week 6**

**Foundation:**
The diagram below shows a triangle with two given exterior angles. The sizes of the exterior angles are $110^\circ$ and $2y$.
Find the value of $y$ explaining clearly how you found the answer.

![Diagram of a triangle with exterior angles](image)

**Higher:**
Two **similar** mugs are shown below.

![Similar mugs](image)

Given that $1cm^3 = 1ml$ and that tea costs £2.74 a litre, find the cost of filling the smaller mug with tea. Give your to the nearest penny.