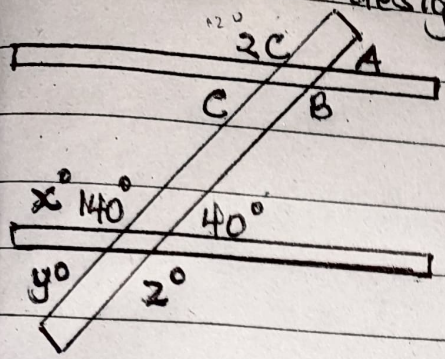
Zach's straw design.



$y^\circ = 40^\circ$

$z^\circ = 140^\circ$

$C + 2C = 180^\circ$

$3C = 180^\circ$

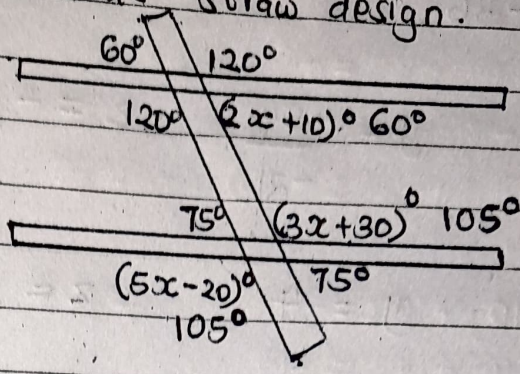
$C = 60^\circ$

$2C = 120^\circ$

$A = 60^\circ$

$B = 120^\circ$

David's straw design.



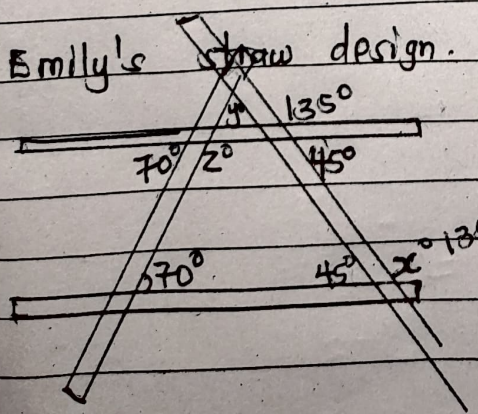
$5x - 20 = 3x + 30$

$2x = 50$

$x = 25^\circ$

The lines that appear to be parallel are not really parallel. This is because parallel lines cut with an intersecting transversal creates pairs of angles with special properties. In our case the vertically opposite angles are equal but the corresponding and alternate angles are not equal. If the lines were parallel the above angles should be equal.

Emily's straw design.

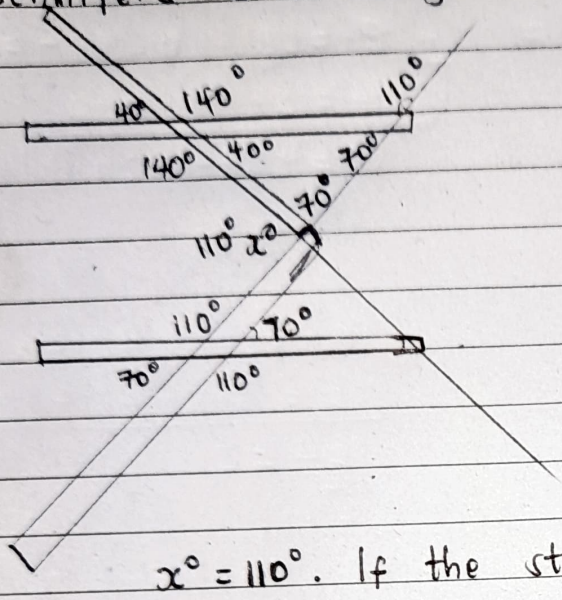


$x^\circ = 135^\circ$ x corresponds to angle 135°.

$y^\circ = 65^\circ$. Angle y, 70° and 45° make a triangle which adds up to 180°.

$z^\circ = 110^\circ$. The angle alternate to angle 70° makes a straight line with angle z° which adds up to 180°. Also consecutive interior angles add up to 180°. $70^\circ + z^\circ = 180^\circ$.

Jennifer's straw design.



$x^\circ = 110^\circ$. If the straws are extended we get two transversal lines and a triangle is made that adds up to 180°. x° and 70° ~~make~~ are on a straight line and they should add up to 180°.