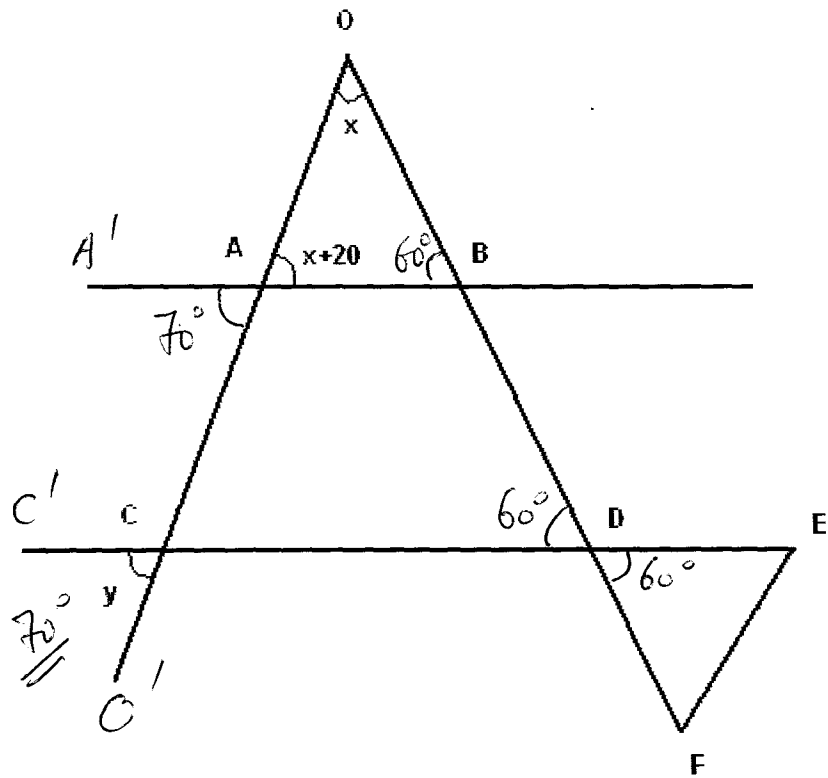


**Geometry Worksheet: Angle (2)**

In the figure below, AB is parallel to CD and DEF is an equilateral triangle. Find the measure of angle y.



Since DEF is equilateral  $\Rightarrow \angle EDF = 60^\circ$   
 $\Rightarrow \angle BDC = 60^\circ \Rightarrow \angle OBA = 60^\circ$  (Corresponding angles).

Use triangle AOB to write:  $(x+20) + x + 60 = 180^\circ$

Solve for x:  $x = 50^\circ$

$\Rightarrow \angle A'AC = x+20 = 70^\circ$

$\Rightarrow y = \underline{\underline{70^\circ}}$  (corresponding angle).