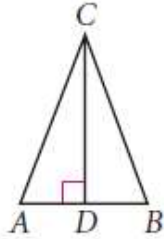


$\triangle ABC$ is isosceles with $\overline{AC} \cong \overline{BC}$.

1) Perimeter $\triangle ABC = 48$

$AC = 18$

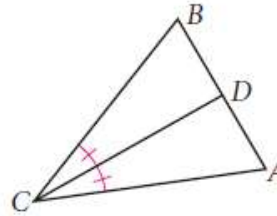
$AD = \underline{\hspace{2cm}}$



2) $m\angle ABC = 72^\circ$

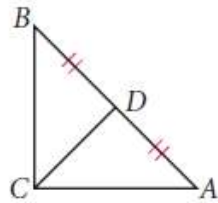
$m\angle ADC = \underline{\hspace{2cm}}$

$m\angle ACD = \underline{\hspace{2cm}}$

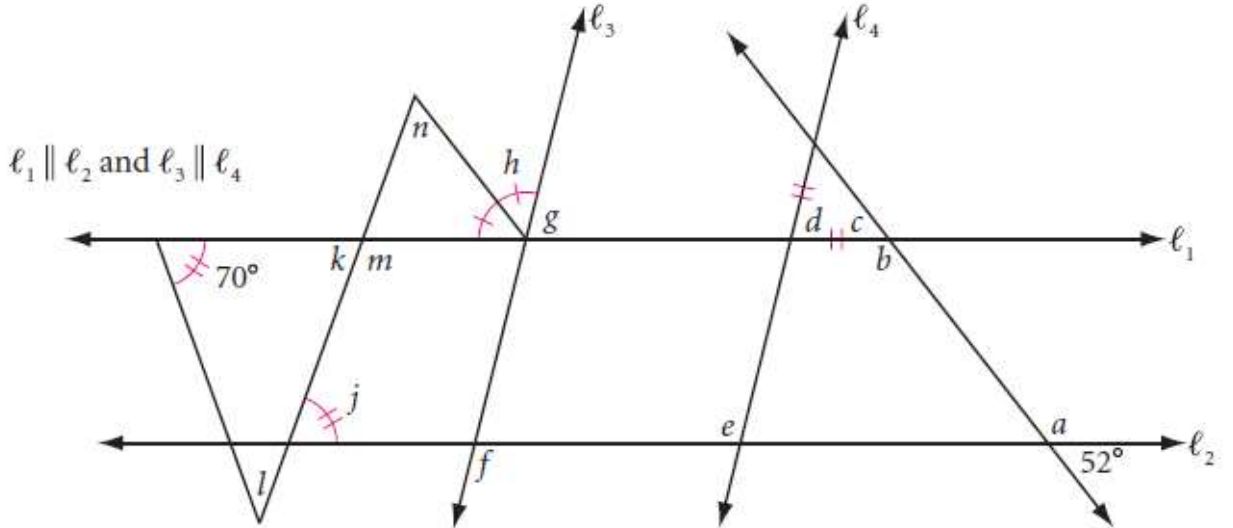


3) $m\angle CAB = 45^\circ$

$m\angle ACD = \underline{\hspace{2cm}}$



4) Calculate the measure of each lettered angle.



5) How many minutes after 3:00 will the hands of a clock overlap?