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$\triangle ABC \sim \triangle PQR$ by AAA similarity

1 (v)

$\triangle s$ are not similar
 $\because \angle A$ is not included

1 (ii)

$\frac{AB}{QR} = \frac{BC}{PR} = \frac{AC}{PQ} = \frac{1}{2}$

1 (vi)

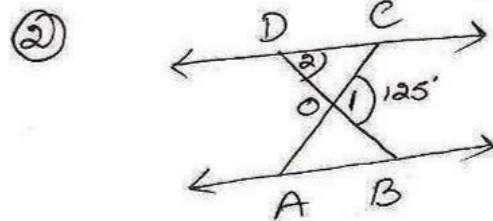
$\therefore \triangle ABC \sim \triangle PQR$ by SSS similarity

In $\triangle DEF$
 $\angle F = 180 - (80 + 70) = 30^\circ$
 In $\triangle PQR$
 $\angle P = 180 - (80 + 30) = 70^\circ$

1 (iii)

$\therefore \triangle DEF \sim \triangle PQR$ by AAA similarity

$\frac{MP}{DE} = \frac{PL}{FD} = \frac{1}{2} \neq \frac{LM}{EF}$
 $\therefore \triangle s$ are not similar



1 (iv)

To find $\angle DOC$, $\angle DCO$, $\angle OAB$

$\frac{NM}{PQ} = \frac{ML}{QR} = \frac{1}{2}$, $\angle M = \angle Q = 70^\circ$
 $\therefore \triangle MNL \sim \triangle PQR$ by SAS prop.

Sol $\angle 1 + \angle DOC = 180^\circ$ (linear pair axiom)
 $\Rightarrow \angle DOC = 180 - 125 = 55^\circ$
 $\angle 1 = \angle 2 + \angle DCO$ (exterior \angle prop.)
 $\angle DCO = 180 - 125 = 55^\circ$