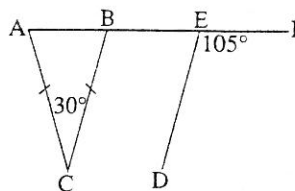
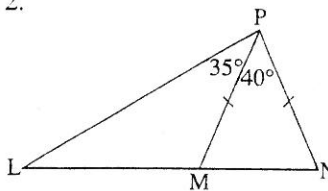


GUIDED PROOFS

Complete each of the following proofs.

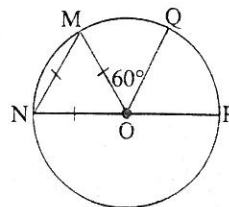
1.  **Given:** $AC = BC$,
 $\angle ACB = 30^\circ$,
 $\angle DEF = 105^\circ$
Show: $BC \parallel ED$

statement	reason
$AC = BC$	
$\angle BAC = \angle ABC = \quad^\circ$	
$\angle CBE = \quad^\circ$	
$\angle CBE = \angle DEF$	
$BC \parallel DE$	

2.  **Given:** $PN = PM$,
 $\angle LPM = 35^\circ$,
 $\angle MPN = 40^\circ$
Show: $LM = PN$

statement	reason
$PN = PM$	
$\angle PMN = \angle PNM = \quad^\circ$	
$\angle LMP = \quad^\circ$	
$\angle MLP = \quad^\circ$	
$\angle MLP = \angle MPL$	
$LM = PM$	
$LM = PN$	

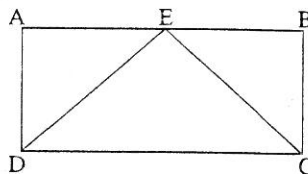
3.



- Given:** $\triangle MNO$ is
equilateral,
 $\angle MOQ = 60^\circ$
Show: $MN \parallel OQ$

statement	reason
$\triangle MNO$ is equilateral	
$\angle NMO = \quad^\circ$	
$\angle MOQ = \quad^\circ$	
$\angle NMO = \angle MOQ$	
$MN \parallel OQ$	

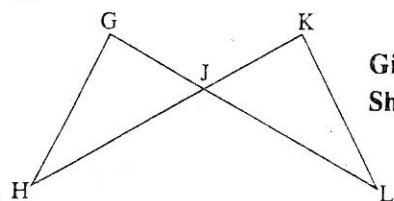
4.



- Given:** $ABCD$ is a
rectangle,
 $\angle ADE = \angle BCE$
 $= 50^\circ$
Show: $ED = EC$

statement	reason
$ABCD$ is a rectangle	
$\angle ADC = \angle BCD = \quad^\circ$	
$\angle ADE = \angle BCE = \quad^\circ$	
$\angle EDC = \quad^\circ$	
$\angle ECD = \quad^\circ$	
$\angle EDC = \angle ECD$	
$ED = EC$	

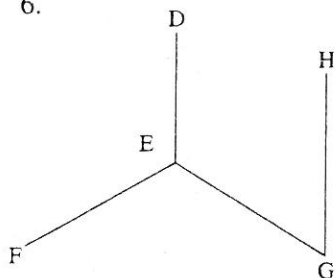
5.



Given: $\angle G = \angle K$
 Show: $\angle H = \angle L$

statement	reason
$\angle G = \angle K$	
$\angle GJH = \angle KJL$	
$\angle H = \angle L$	

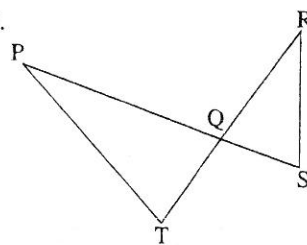
6.



Given:
 $\angle DEF = \angle DEG = \angle FEG$,
 $\angle EGH = 60^\circ$
 Show: $DE \parallel HG$

statement	reason
$\angle DEF = \angle DEG = \angle FEG$	
$\angle DEG = \underline{\hspace{1cm}}^\circ$	
$\angle EGH = \underline{\hspace{1cm}}^\circ$	
$\angle DEG$ and $\angle EGH$ are supplementary	
$DE \parallel HG$	

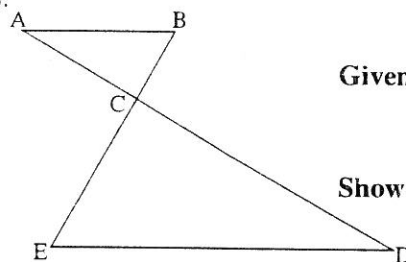
7.



Given: $\angle PTQ = \angle RQS$
 Show: $\triangle PQT$ is isosceles

statement	reason
$\angle PTQ = \angle RQS$	
$\angle PQT = \angle RQS$	
$\angle PTQ = \angle PQT$	
$\triangle PQT$ is isosceles	

8.



Given: $BE \perp AD$,
 $\angle ABC = 60^\circ$,
 $\angle CDE = 30^\circ$
 Show: $AB \parallel ED$

statement	reason
$BE \perp AD$	
$\angle ACB = \angle ECD = \underline{\hspace{1cm}}^\circ$	
$\angle ABC = \underline{\hspace{1cm}}^\circ$	
$\angle CAB = \underline{\hspace{1cm}}^\circ$	
$\angle CDE = \underline{\hspace{1cm}}^\circ$	
$\angle CAB = \angle CDE$	
$AB \parallel ED$	