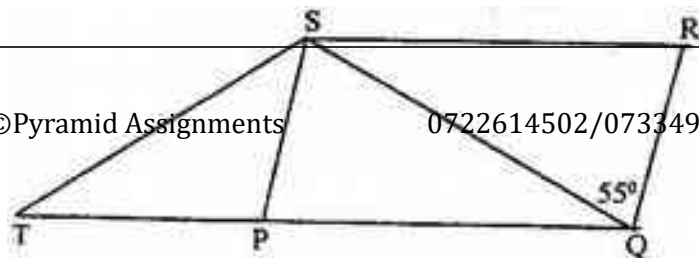


NAME _____ INDEX NUMBER _____

SCHOOL _____ DATE _____

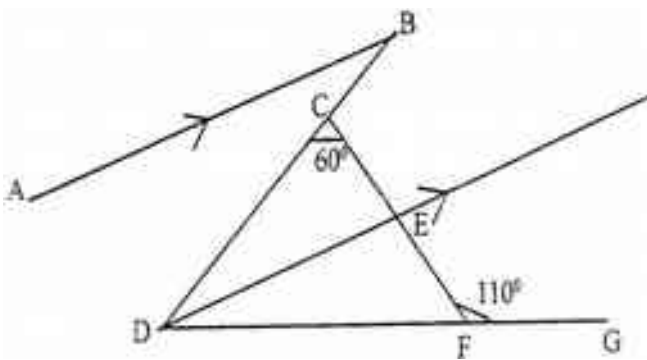
ANGLES AND PLANE FIGURES

<i>KCSE 1989 – 2012 Form 1 Mathematics</i>	Working space
<p>1. 1989 Q8 P2 In the figure below, GJ is parallel to HI and FH is parallel to CJ. Angle AGB = 30°, and angle AHC = 63°. Find angle GCJ (2marks)</p> <div style="text-align: center; margin: 10px 0;"> </div>	
<p>2. 1991 Q10 P2 In the figure below AB // DE, <ABC = 70° and <CDE = 23°. Find <BCD (3marks)</p> <div style="text-align: center; margin: 10px 0;"> </div>	
<p>3. 1997 Q3 P1 In the figure below PQRS is a rhombus, <SQR = 55°, <QST is a right angle and TPQ is a straight line</p> <div style="text-align: center; margin: 10px 0;"> </div>	Working Space



Find the size of the angle STQ

4. **1998 Q 4 P1**
 In the figure below, AB is parallel to DE, DE bisects angle BDG, angle DCF = 60° and angle CFG = 110°



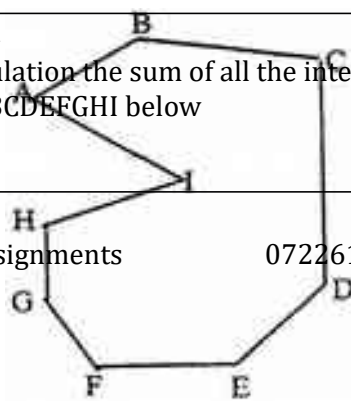
Find

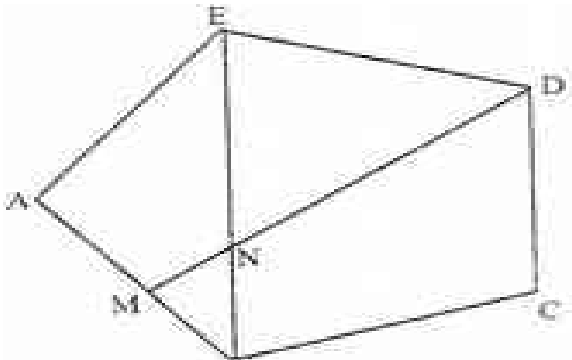
- (a) $\angle CDF$
 (b) $\angle ABD$

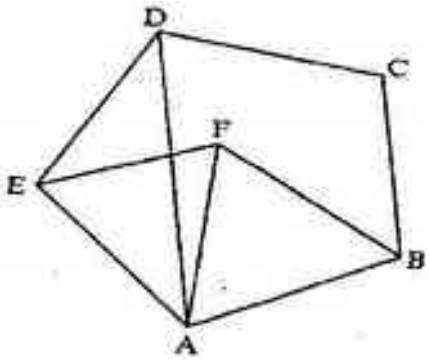
Give reasons for your answers

Working Space

5. **1999 Q 3 P1**
 Find by calculation the sum of all the interior angles in the figure ABCDEFGHI below



6.	<p>2000 Q 3 P1 In the figure below ABCD is a rectangular pentagon and M is the midpoint of AB. DM intersects EB at N.</p>  <p>Find the size of: \angle</p> <p>(a) $\angle BAE$ (b) $\angle BED$ (c) $\angle BNM$</p>	
7.	<p>2001 Q 14 P1 The interior angles of the hexagon are $2x^\circ$, $\frac{1}{2}x^\circ + 40^\circ$, 110°, 130° and 160°. Find the value of the smallest angle</p>	
8.	<p>2004 Q 2 P1 The size of an interior angle of a regular polygon is 156°. Find the number of sides of the polygon.</p>	Working Space
9.	<p>2005 Q 5 P1 The size of each interior angle of a regular polygon is five times the size of the exterior angle. Find the number of sides of the polygon. (3 marks)</p>	

10.	<p>2006 Q 4 P1 In the figure below, ABCDE is a regular pentagon and ABF is an equilateral triangle (1mark)</p>  <p>Find the size of</p> <p>a) $\angle ADE$ (1 mark) b) $\angle AEF$ (1 mark) c) $\angle DAF$ (1 mark)</p>	
11.	<p>2007 Q 2 P1 The size of an interior angle of a regular polygon is $3x^\circ$ while its exterior angle is $(x- 20)^\circ$. Find the number of sides of the polygon (3 marks)</p>	
12.	<p>2009 Q 10 P1 The size of an interior angle of a regular polygon is $6\frac{1}{2}$ times that of its exterior angle. Determine the number of sides of the polygon (3 marks)</p>	