

Form 3 Mathematics – Deductive Geometry (II)

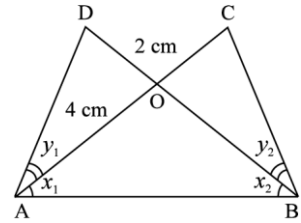
Name: _____ () Class: _____

Date: _____, 2011

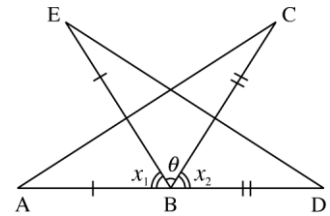
1. In the figure, $x_1 = x_2$, $y_1 = y_2$, $AO = 4$ cm and $OC = 2$ cm.

(a) Prove that $\triangle ABC \cong \triangle BAD$.

(b) Find BD .



2. In the figure below, $AB = BE$, $BC = BD$ and $x_1 = x_2$. Prove that $AC = DE$.



3. In the figure below, $AB = AC$ and $DB = DC$. Prove that

(a) $a_1 = a_2$,

(b) AE is the perpendicular bisector of BC . [Hint: Prove $\triangle ABE \cong \triangle ACE$ first.]

