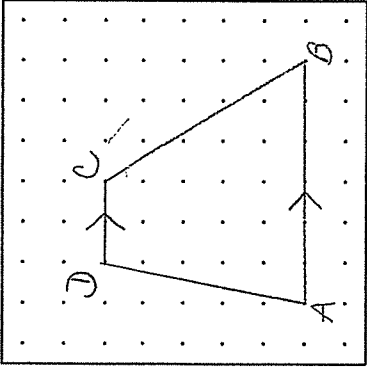
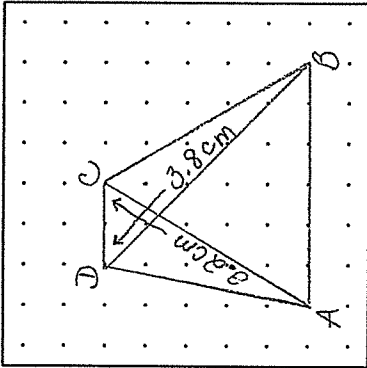
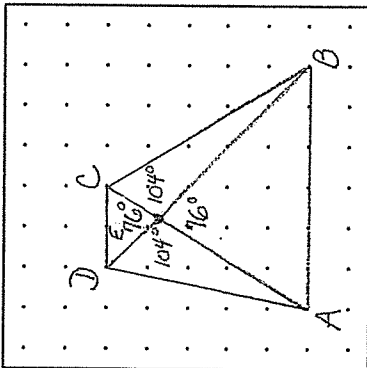


DESCRIPTION OF TRAPEZOID		DIAGRAM OF TRAPEZOID
DIAGONAL INVESTIGATION #2 DO THE DIAGONALS BISECT EACH OTHER? No		DIAGONAL INVESTIGATION #1 ARE THE DIAGONALS CONGRUENT? No
DIAGONAL INVESTIGATION #4 DO THE DIAGONALS BISECT VERTEX ANGLES? No		DIAGONAL INVESTIGATION #3 ARE THE DIAGONALS PERPENDICULAR? No

		A trapezoid is a <u>quadrilateral</u> with <u>exactly one</u> pair of <u>parallel</u> sides.	
$m\overline{AC} = \underline{3.2\text{ cm}}$ $m\overline{BD} = \underline{3.8\text{ cm}}$ Since $\overline{AC}$ is <u>not congruent</u> to $\overline{BD}$, then the diagonals of trapezoids <u>are not congruent</u>.			$m\overline{DE} = \underline{0.9\text{ cm}}$ $m\overline{BE} = \underline{2.9\text{ cm}}$ Since $m\overline{DE} \neq m\overline{BE}$ then diagonal $\overline{DB}$ <u>has not been bisected</u>. $m\overline{AE} = \underline{2.4\text{ cm}}$ $m\overline{CE} = \underline{0.8\text{ cm}}$ Since $m\overline{AE} \neq m\overline{CE}$ then diagonal $\overline{AC}$ <u>has not been bisected</u>.
$m\angle DEC = \underline{76^\circ}$ $m\angle CEB = \underline{104^\circ}$ $m\angle BEA = \underline{76^\circ}$ $m\angle AED = \underline{104^\circ}$ In order for the diagonals to be perpendicular, the angles formed at the intersection of the diagonals must be 90°. Since <u>none of these angles are</u> 90°, the diagonals are <u>not perpendicular</u>.			$m\angle DAC = \underline{20^\circ}$ $m\angle CAB = \underline{60^\circ}$ Since $\angle DAC$ is <u>not congruent</u> to $\angle CAB$, then $\angle DAB$ (which is a vertex angle) <u>has not been bisected</u>. $m\angle ABD = \underline{45^\circ}$ $m\angle DBC = \underline{14^\circ}$ Since $\angle ABD$ is <u>not congruent</u> to $\angle DBC$, then $\angle ABC$ (which is a vertex angle) <u>has not been bisected</u>.