GEOMETRY TUNEUP 11A

Name_____

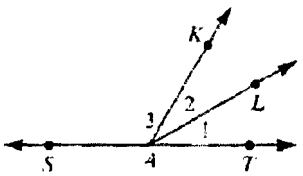
SHOW WORK.

Col._____ Period_____

1. $\overrightarrow{AL}$ bisects $\angle KAT$. Find x and $m\angle 2$ if

$m\angle 1 = 7x+3$

$m\angle 2 = 6x+7$

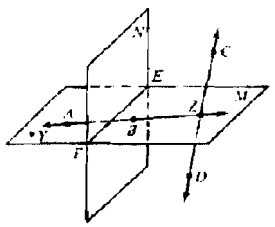


2. True or False?

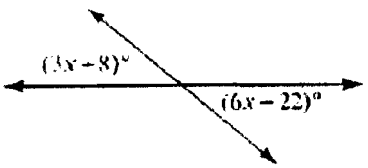
a. A is on plane N.

b. B is on $\overleftrightarrow{AZ}$.

c. planes N and M intersect in $\overleftrightarrow{FE}$



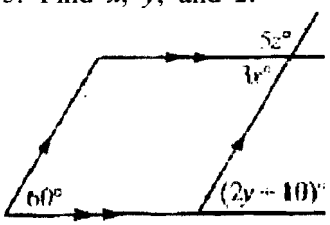
3. Find x.



4. $\angle E$ and $\angle F$ are supplementary; $m\angle E = y-9$, $m\angle F = 4y+14$.

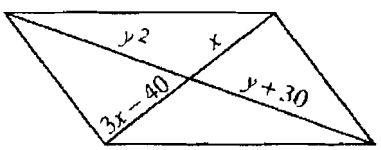
Find y_____, $m\angle E$_____, $m\angle F$.

5. Find x, y, and z.

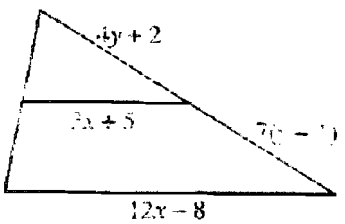


6. Find the interior angle sum and the measure of each angle of a regular hexagon.

7. What values must x and y have to make this quadrilateral a parallelogram?



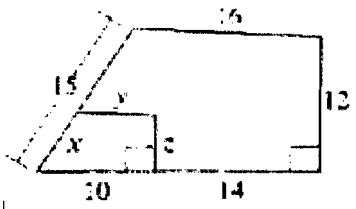
8. Find the values of x and y.



9. The diagonals of a rhombus measure 6 inches and 8 inches. Find the perimeter of the rhombus.

10. The lengths of 2 sides of a triangle are 10 and 15. The third side must be greater than ____ but less than _____ .

11. Two similar polygons are shown. Find x, y, and z.

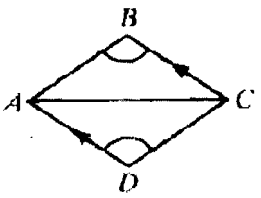


12. A 16-foot tower casts a 21-foot shadow. How tall is a building that casts a 56-foot shadow at the same time?

13. Complete the proof:

Given: $\angle B \cong \angle D$
$\overline{BC} \parallel \overline{AD}$

Prove: $\overline{AB} \cong \overline{CD}$



STATEMENTS	REASONS
1. $\angle B \cong \angle D$, $\overline{BC} \parallel \overline{AD}$	1.
2. $\angle BCA \cong \angle DAC$	2.
3. $\overline{AC} \cong \overline{CA}$	3.
4. $\Delta ABC \cong \Delta$_____	4.
5. $\overline{AB} \cong \overline{CD}$	5.