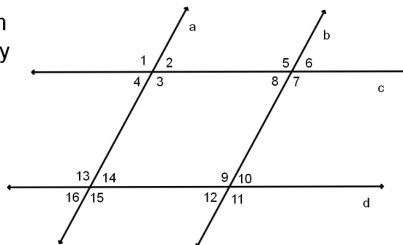


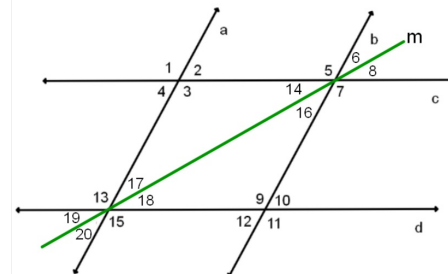
Geometry Bellwork Monday, December 2, 2013

Use the figure at the right and the given information to determine if there are any parallel lines. If yes, state which lines are parallel and give a reason.



1. $\angle 1 \cong \angle 5$
allb corr $\angle$ s $\cong$
2. $\angle 9$ supp with $\angle 5$
No parallel
3. $\angle 6 \cong \angle 14$
No parallel
4. $\angle 10 \cong \angle 16$
allb Alt ext $\angle$ s $\cong$
5. $\angle 1$ supp with $\angle 4$
No parallel

Name the parallel lines and the transversal that form each pair of angles then name the angles.



8. $\angle 1$ & $\angle 15$
c || d
trans a
Alt ext $\angle$ s

6. $\angle 8$ & $\angle 18$
c || d corr $\angle$ s
m is the transr.
7. $\angle 7$ & $\angle 4$
allb SSE
trans c
9. $\angle 17$ & $\angle 16$
allb trans m
alt int $\angle$ s

10. Find the measure of one interior angle of a regular 24-gon.

$$(24-2)180 = \frac{3960}{24} = 165^\circ$$

$$\begin{array}{r} 360 \\ \div 24 \\ \hline 15^\circ \end{array}$$

11. Find the number of sides of a regular polygon if the measure of one interior angle is 135°

$$n \cdot \frac{(n-2)180}{n} = 135 \cdot n \rightarrow \begin{array}{r} 180n - 360 = 135n \\ -180n \quad -180n \\ \hline -360 = -45n \\ n = 8 \end{array}$$

12. Can a polygon have a sum of its interior angles equal to 4200° ?

$$\begin{array}{r} (n-2)180 = 4200 \\ \hline 180 \quad 180 \\ n-2 = 23.33 \end{array} \quad \text{NO}$$