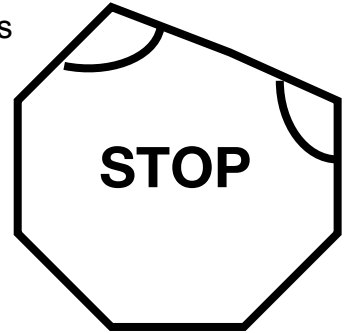


H. Geom. Parallels _____ Review

Name _____

1. The corner of a stop sign (a regular octagon) is cut off. What is the measure of one of the two new (congruent) angles?



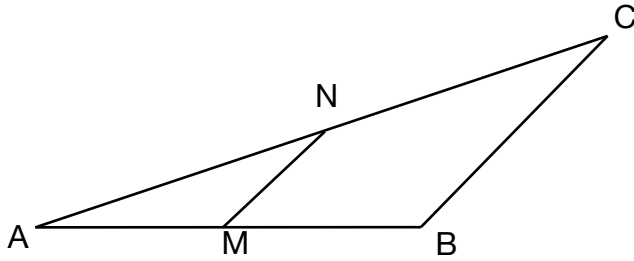
2. Each interior angle of a regular polygon measures 162° . What is the **sum** of the interior angles?

3. Answer the following (A)lways, (S)ometimes, or (N)ever (*Assume Euclidean Space*)

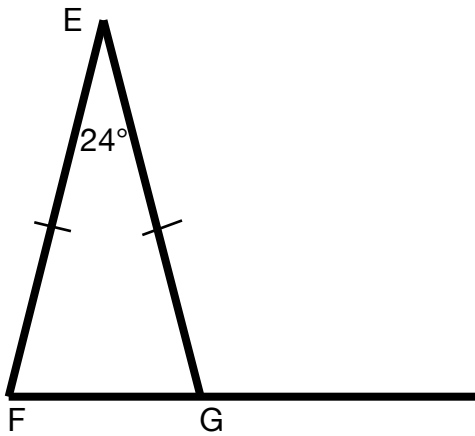
- a. Vertical lines are perpendicular. _____
- b. Horizontal planes are parallel. _____
- c. Horizontal lines are skew. _____
- d. Non-intersecting lines are parallel. _____
- e. Two lines perpendicular to the same line are parallel. _____
- f. Two lines perpendicular to the same line are perpendicular. _____
- g. Two lines perpendicular to the same plane are parallel. _____

5. Find the value of x in each of the problems below.

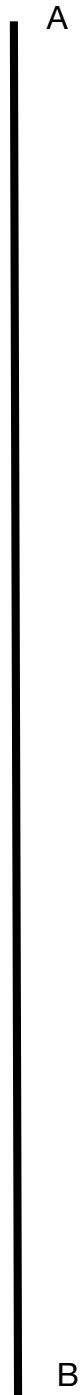
a) M and N are midpoints, $MN = 8 - 2x$, $BC = 2x^2 + 10$



b) $\triangle EFG$ is isosceles, the exterior angle at $G = x^2 + 2x + 3$

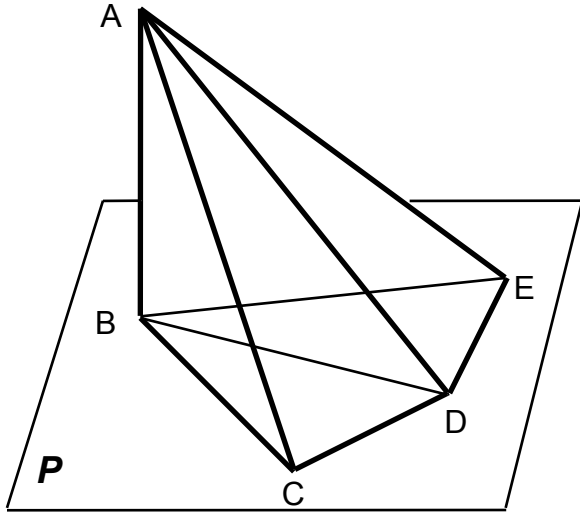


6. Construct $\triangle ABC$ on the base shown, such that $m\angle A = 30^\circ$ and $m\angle B = 45^\circ$. Then construct a line through point C that is parallel to \overline{AB} .



7. Given: $\overline{AB} \perp \mathbf{P}$, $\overline{AC} \cong \overline{AE}$ and
 \overline{BD} bisects $\angle CBE$

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



8. Prove indirectly.

Given: \overline{AE} bis \overline{BD}

\overline{AB} not $\parallel \overline{DE}$

Prove: C not mdpt \overline{AE}

