Name $\qquad$
Math 7 Honors

Date $\qquad$
Special Angles w/s \#3

1. Identify a pair of corresponding angles.
2. Identify a pair of alternate exterior angles.
3. If the measure of $\Varangle \mathrm{APE}=130^{\circ}$, find the measure of $\Varangle B P Q$. Explain how you determined your answer.

Use the diagram below to answer questions \#1-4.

4. If the measure of $\Varangle \mathrm{APE}=130^{\circ}$, find the measure of $\Varangle E P B$. Explain how you determined your answer.

5. In the diagram above, line $A B$ is parallel to line $C D$. The measure of $\Varangle \mathrm{BGH}=84^{\circ}$. Find the measure of the following angles and justify each answer.
$\Varangle \mathrm{AGE}=$ $\qquad$ Reason $\qquad$
$\Varangle \mathrm{FHD}=$ $\qquad$ Reason $\qquad$
$\Varangle \mathrm{GHD}=$ $\qquad$ Reason $\qquad$
6. In the diagram below, $\overleftrightarrow{E F} \| \overleftrightarrow{G H}$ and line k intersects both lines.

[not drawn to scale]

What is the measure of $\Varangle \mathrm{Z}$ ?
A $40^{\circ}$
B $50^{\circ}$
C $130^{\circ}$
D $140^{\circ}$
7. In the diagram to the right, parallel lines are intersected by a transversal.

What is the measure of $\Varangle U$ ? $\qquad$
How did you determine your answer? $\qquad$
$\qquad$
$\qquad$

[not drawn to scale]

