Section 5.2 homework Pg.263 #1-12

1. What is the sum of the measures of the exterior angles of a decagon?

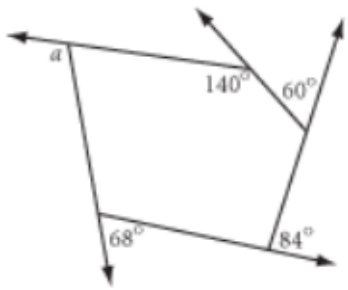
2. What is the measure of an exterior angle of an equiangular pentagon?
An equiangular hexagon?

3. How many sides does a regular polygon have if each exterior angle measures 24°?

4. How many sides does a polygon have if the sum of its interior angle measures is 7380°?

In Exercises 5–10, use your new conjectures to calculate the measure of each lettered angle.

5.



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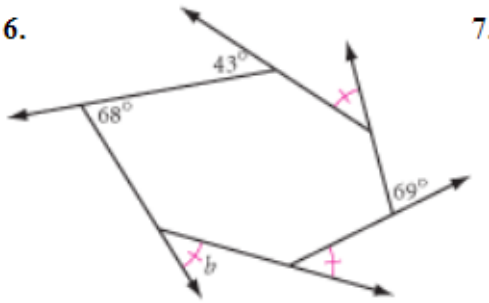

7. (h)

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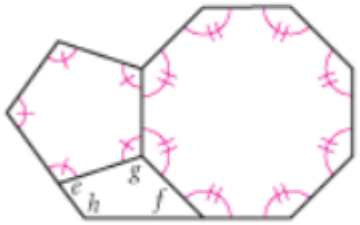
8.



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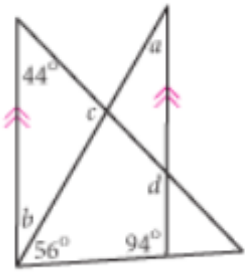

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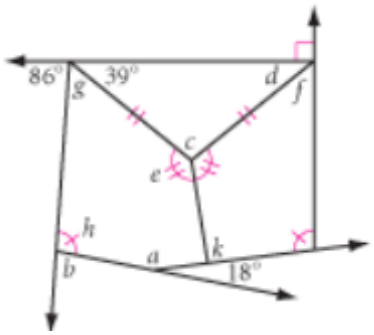
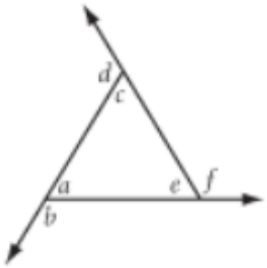
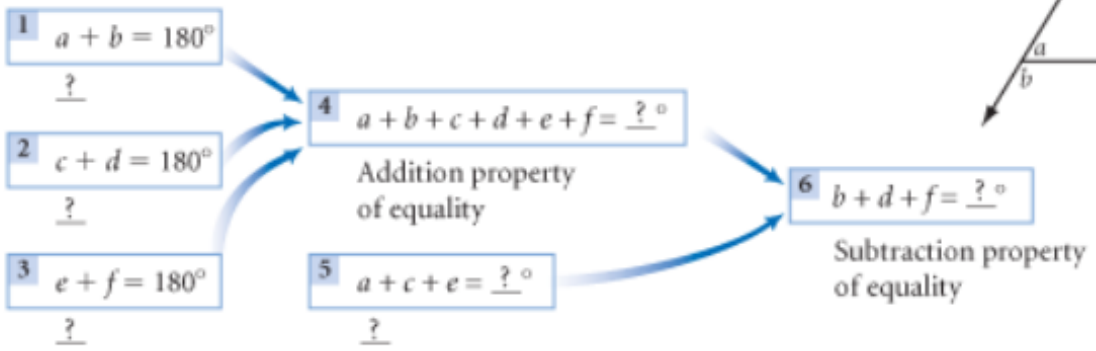


11. ***Developing Proof*** Complete this flowchart proof of the Exterior Angle Sum Conjecture for a triangle.



Flowchart Proof



12. Is there a maximum number of obtuse exterior angles that any polygon can have? If so, what is the maximum? If not, why not? Is there a minimum number of acute interior angles that any polygon must have? If so, what is the minimum? If not, why not? (h)