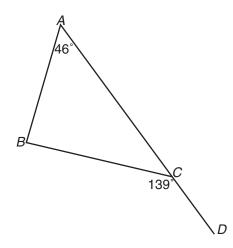
Unit 4: Geometry Lesson 4.2



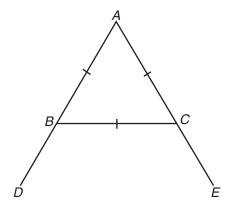
Coach's Corner - III

1. Determine all the unknown angles in the following diagrams. Explain your reasoning.

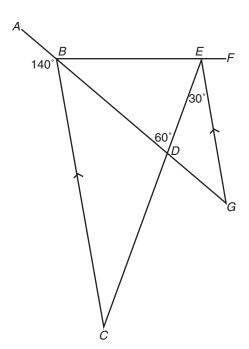
a.



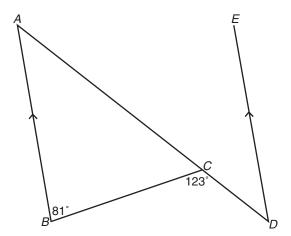
b.



2. Jane drew the following diagram. Explain whether or not Jane's diagram is reasonable.



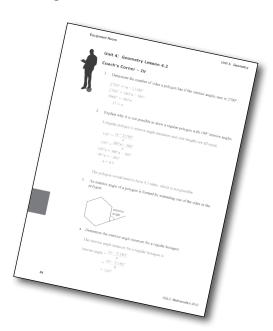
3. Using the diagram below, prove that $\angle D = 42^{\circ}$.



Please go to the *Equipment Room* to check your solutions before returning to *Lesson 4.2*.

After you have assessed your work, reflect upon your understanding of the concepts addressed in the *Coach's Corner* exercises in the table provided.

Question Number	Got it!	Almost there	Need to retry or ask for help.
1			
2			
3			



Unit 4: Geometry Lesson 4.2

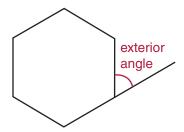


Coach's Corner – IV

1. Determine the number of sides a polygon has if the interior angles sum is 2700°.

2. Explain why it is not possible to draw a regular polygon with 100° interior angles.

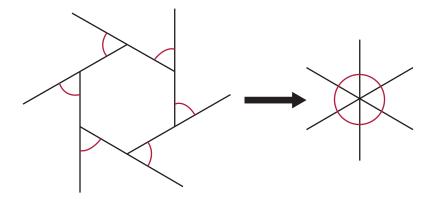
3. An exterior angle of a polygon is formed by extending one of the sides in the polygon.



a. Determine the exterior angle measure for a regular hexagon.

b. If one exterior angle is drawn at each vertex, what is the exterior angles sum for a regular hexagon?

c. When the exterior angles for any convex polygon are placed side by side they make a complete rotation.

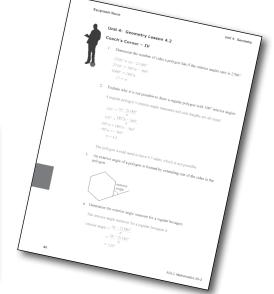


Explain how you could use this information to determine the exterior angle measure for regular polygon with n sides.

Please go to the *Equipment Room* to check your solutions before proceeding to *Game On!*, on the next page of this *Workbook*.

After you have assessed your work, reflect upon your understanding of the concepts addressed in the *Coach's Corner* exercises in the table provided.

Question Number	Got it!	Almost there	Need to retry or ask for help.
1			
2			
3			



Note: Before you complete *Game On!*, you may review your skills and get more practice by completing the following problems in *Principles of Mathematics 11*.

- Page 90, #1, 2, 3b, 4, 6, 10, 12a, and 14
- Page 99, #3, 6, 9, 13, and 15

Check your work in Strengthening and Conditioning.

