



FIRST LEGO LEAGUE - Ontario

Questions

Question 1  
Math

Do you see a pattern between the number of sides, and the size of the angles in that shape?

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Question 2  
Math

Estimate what angle a 12 sided shape (a dodecagon) might have. Use the data you have collected to guide your intelligent guess.

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Question 3  
Math

The general formula for the SUM of all the interior angles of any polygon is 180 multiplied by some factor which takes into the account the number of sides. As an example:  
Sum = 180 x nx5 (where n is the number of sides)  
\*This of course proves to be incorrect if we test it out.  
  
Experiment until you find a multiplier that fits the pattern from your observations.

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Question 4  
Coding

Since all sides of a regular polygon are the same. Write a general formula for the interior angles of any polygon.

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Question 5 Coding	Use your general formula, calculate the interior angles of a 24 sided regular pentagon.
Question 6 Coding	Why are general formulas so useful?
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