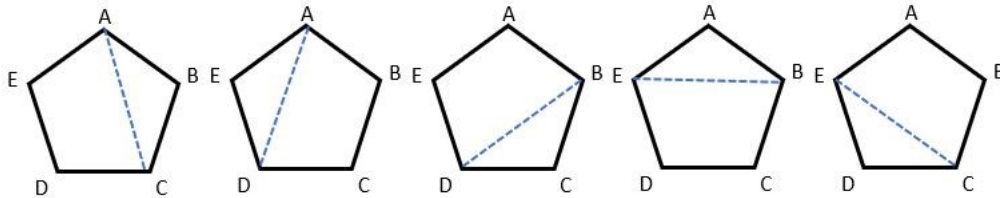


Diagonals

Mathematically speaking, a diagonal of a polygon is a line connecting any two opposite vertices (corners). For example, a pentagon has five diagonals.



Note that diagonal AC is the same as diagonal CA.

If a pentagon has five diagonals, how many diagonals do polygons with other numbers of sides have?

Is there a pattern for the number of diagonals that allow you to predict the number of diagonals for a hectogon (100 sides)?