

Definition of a Convex Pentagon

Emily Jacobs

April 30, 2015

1. The definition of a convex figure can be useful in proving many theorems. This definition is specifically for a convex pentagon.
2. A pentagon will be convex if and only if all of its diagonals lie within the pentagon. Pentagon ABCDE would have diagonals AC, AD, BD, BE, and CE. If all of these diagonals lie within the pentagon, then it has to be a convex polygon. If one of the diagonals lies outside of the pentagon then it will make it a non-convex pentagon.

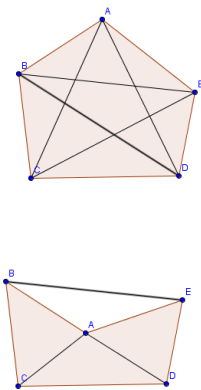


Figure 1: A convex and nonconvex pentagon