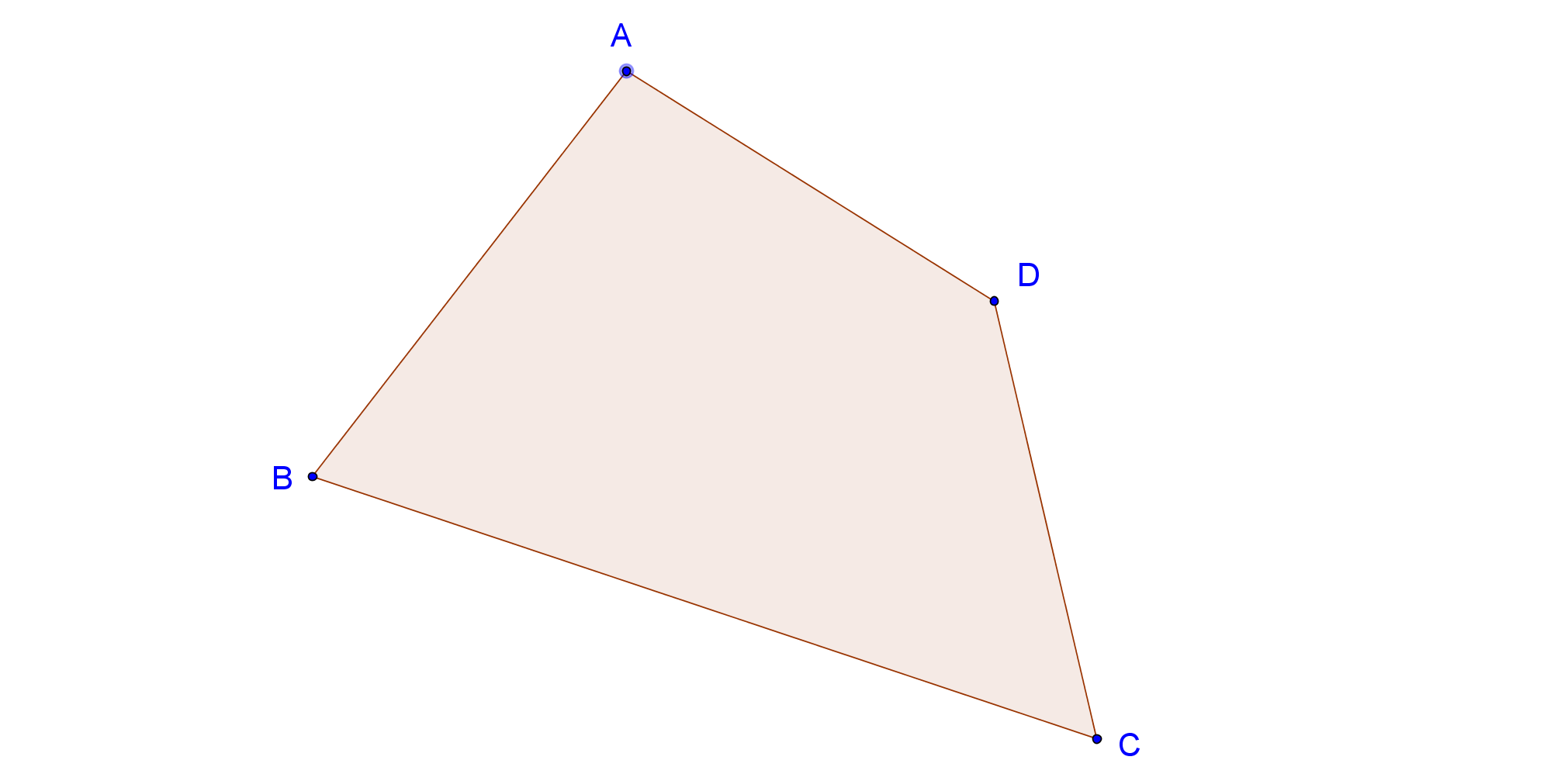
**Activity 3.1.3b Proving the Quadrilateral Sum Theorem**

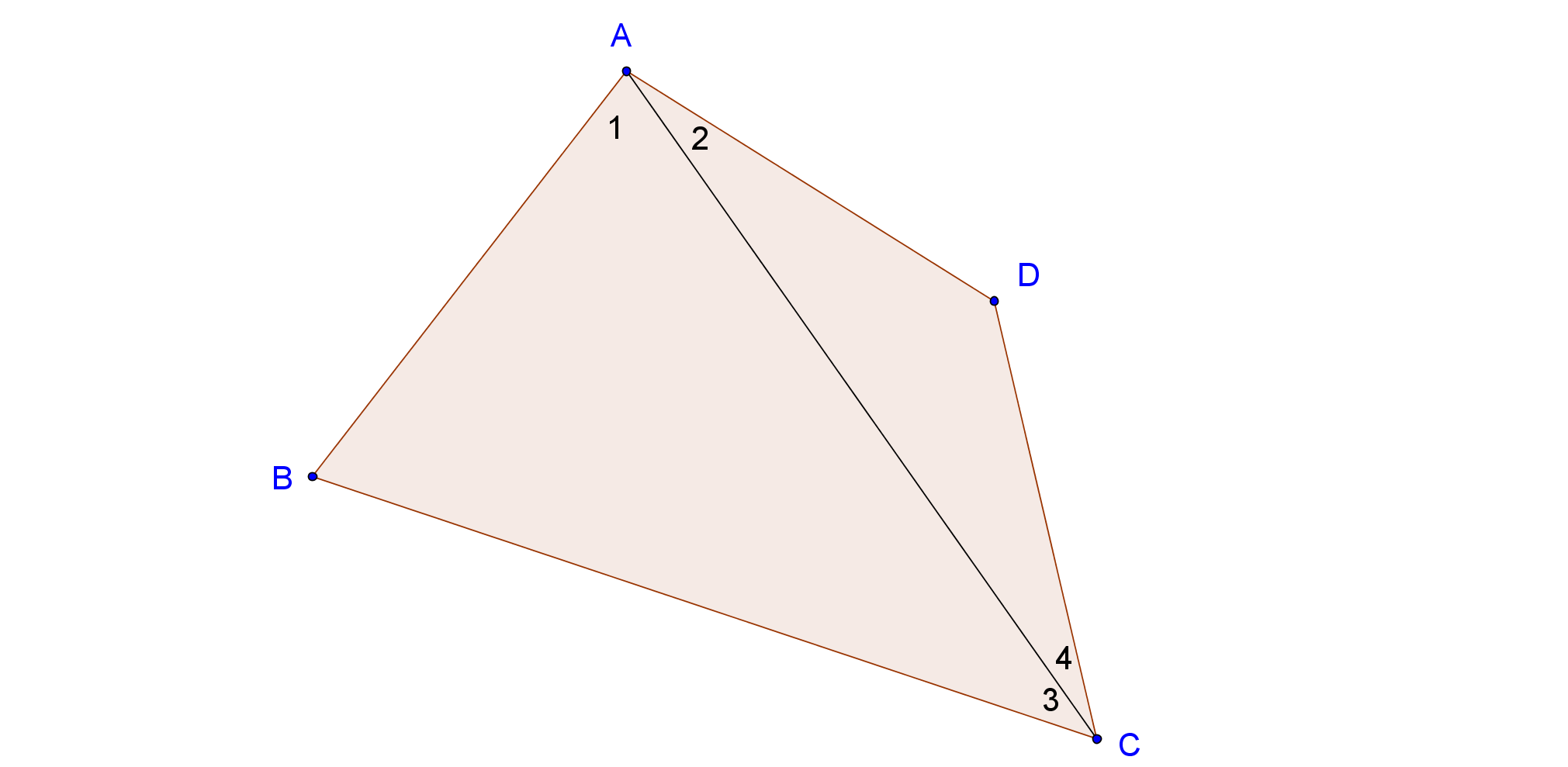


**Quadrilateral Sum Theorem:** The sum of the interior angle measures in any quadrilateral is 360°.

Given: *ABCD* is a quadrilateral

Prove:

Draw diagonal . We can do this because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



Now complete the proof using your knowledge of the triangle angle sum theorem and the above diagram to assist you.