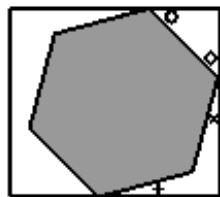




5. The diagram shows a regular hexagon inside a rectangle. What is the sum of the four marked angles?

A  $90^\circ$       B  $120^\circ$       C  $150^\circ$       D  $180^\circ$       E  $210^\circ$



- 
5. **B** As the sum of the angles in a triangle is  $180^\circ$  and all four angles in a rectangle are  $90^\circ$ , the sum of the two marked angles in the triangle is  $180^\circ - 90^\circ = 90^\circ$ . Each interior angle of a regular hexagon is  $120^\circ$  and the sum of the angles in a quadrilateral is  $360^\circ$ ; hence the sum of the two marked angles in the quadrilateral is  $360^\circ - 90^\circ - (360^\circ - 120^\circ) = 30^\circ$ . Hence the sum of the four marked angles is  $90^\circ + 30^\circ = 120^\circ$ .