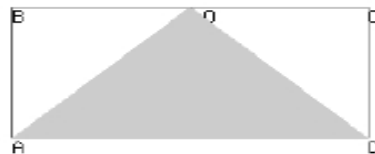


**Answer the questions**

- (1) In a quadrilateral ABCD, the bisectors of  $\angle A$  and  $\angle B$  intersect at P,  $\angle B$  and  $\angle C$  at Q,  $\angle C$  and  $\angle D$  at R and  $\angle D$  and  $\angle A$  at S, what kind of a quadrilateral is PQRS.
- (2) ABCD is a parallelogram and E is the midpoint of side BC. When DE and AB are extended, they meet at point F. If  $AB = 10$  cm and  $AD = 5$  cm, find the measure of AF.
- (3) In the rectangle below, AB is 12 and BC is 18. If O is the midpoint of BC, then what is the area of the shaded region?



- (4) In the parallelogram ABCD, the sum of angle bisectors of two adjacent angles is \_\_\_\_\_

