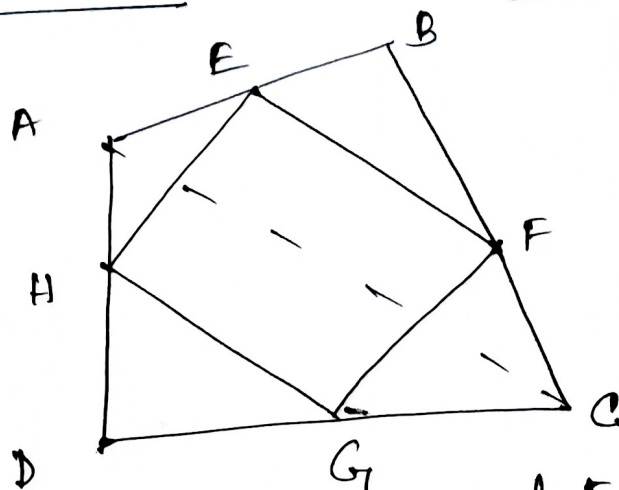


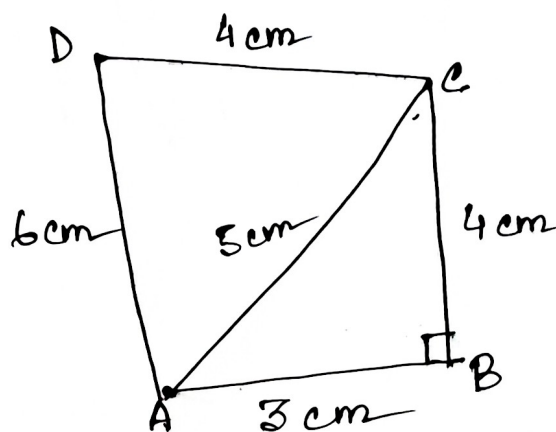
1) In ABCD quadrilateral, AC is a diagonal. We have joined the mid-points of the sides of the quadrilateral to form the quadrilateral EFGH.



Prove that —

- (i) EFGH is a parallelogram.
- (ii) If $\angle HEF = 30^\circ$, find $\angle EFG$.
- (iii) If $HE = 3$ cm, find the length of FG.

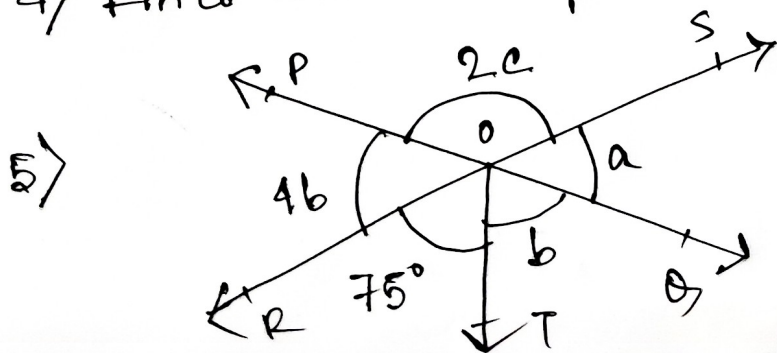
2) Find the area of the quadrilateral ABCD, if $AB \perp BC$.



3) The product of $\sqrt[3]{2} \cdot \sqrt[4]{2} \cdot \sqrt[12]{32}$ is equal to —

- (a) $\sqrt{2}$
- (b) 2
- (c) $\sqrt[12]{32}$
- (d) $\sqrt[12]{2}$

4) Find the values of 'a' and 'b' if $\frac{3-\sqrt{5}}{3+2\sqrt{5}} = a\sqrt{5} - \frac{b}{11}$



In the adjoining figure, PQ & RS intersect each other at 'O'. If $\angle ROQ = 75^\circ$, find the measures of a, b and c.