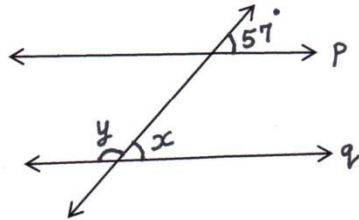


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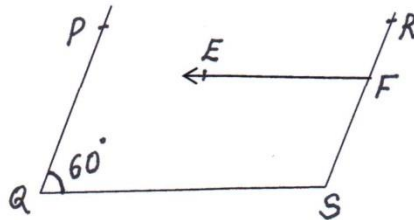
Worksheet For The Academic Year 2023-24

**CLASS: IX    SUBJECT: Mathematics    DATE: 04/06/2023**  
**LESSON-6   Lines & Angles**

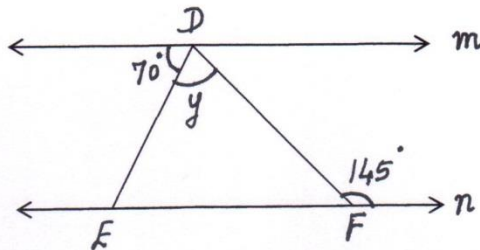
- 1) Prove that “ If two lines intersect each other then the vertically opposite angles are equal”.
- 2) The complement of  $23^\circ$  is \_\_\_\_\_.
- 3) The supplement of  $78^\circ$  is \_\_\_\_\_.
- 4) If two supplementary angles are in the ratio 2:7 then find the angles.
- 5) If  $(6x + 30)^\circ$  and  $4x^\circ$  form a straight angle, find  $x$ .
- 6) If  $p \parallel q$  then find  $x$  in the figure.



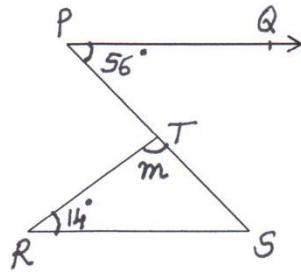
- 7) If  $PQ \parallel RS$  and  $EF \parallel QS$  and  $\angle PQS = 60^\circ$ , find  $\angle RFE$ .



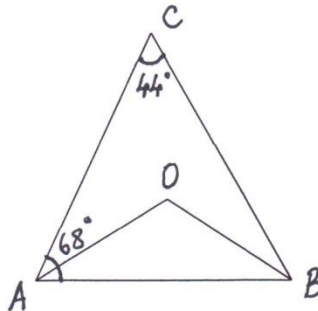
- 8) If  $m \parallel n$ , then find  $y$ .



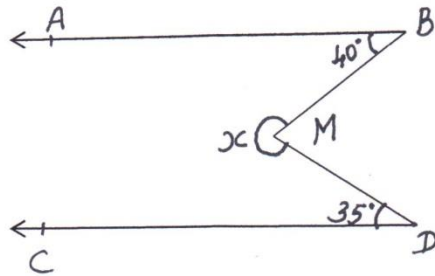
- 9) If  $PQ \parallel RS$  then find  $m$ .



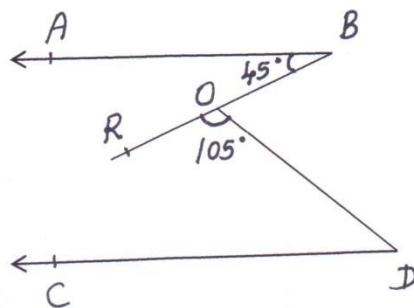
- 10) In the figure,  $AO$  and  $BO$  are bisectors of  $\angle A$  and  $\angle B$  respectively. Find  $\angle AOB$ .



- 11) In the figure  $AB \parallel CD$ , find the value of  $x$ .

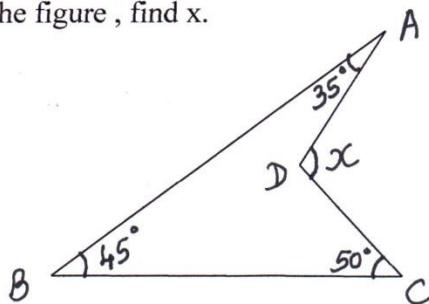


- 12) In the figure if  $AB \parallel CD$ , if  $\angle ABR = 45^\circ$  and  $\angle ROD = 105^\circ$ , find  $\angle ODC$ .

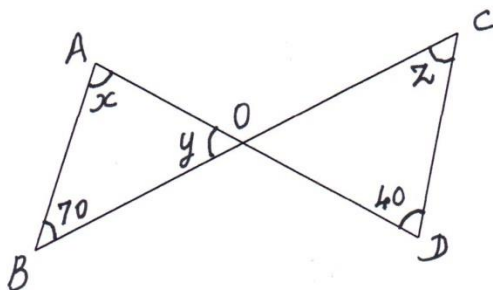


13) An exterior angle of a triangle is  $120^\circ$  and one of the interior opposite angles is  $40^\circ$ . Find the other angles of the triangle.

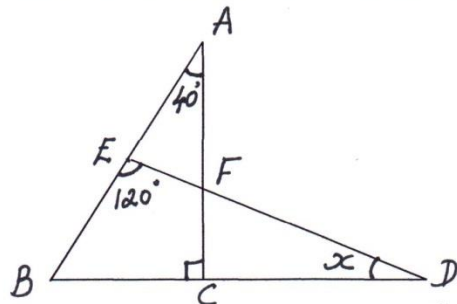
14) In the figure, find  $x$ .



15) If  $AB \parallel CD$ , find  $x$ ,  $y$  and  $z$ .



16) Find  $x$ , if  $\angle A = 40^\circ$  and  $\angle BED = 120^\circ$ .



17) If  $p \parallel q$ , find  $x$ .

