Chapter-Lines and Angles
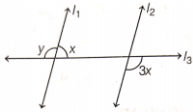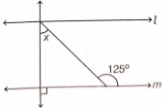
1. In the given figure, if $l_1 || l_2$, then y is equal to
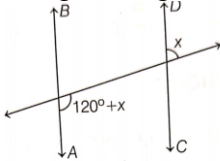

   a) 100°   b) 120°   c) 135°   d) 150°

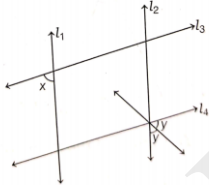2. In the given figure, if lines l and m are parallel, then the value of x is

   a) 35°   b) 55°   c) 65°   d) 75°

3. In the given figure, if AB||CD, then the value of x is
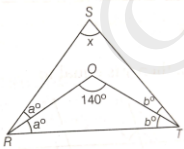

   a) 20°   b) 30°   c) 45°   d) 60°

4. In the given figure, if $l_1 || l_2$ and $l_3 || l_4$. What is y in terms of x?

   a) 90+x   b) 90+2x   c) $90 - \frac{x}{2}$ d) $90 - 2x$

5. In the given figure ΔRST, what is the value of x?
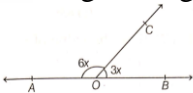

   a) 40°   b) 90°   c) 80°   d) 100°

6. If the supplement of an angle is two –third of itself, then determine the angle and its supplement.
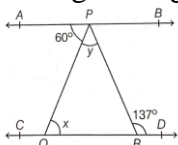
7. If an angle is 16°more than its complement. Then find its measure.

8. Two angles measure $(55° + 3a)$ and $(115° - 2a)$. if each is supplement of the other then calculate the value of a.
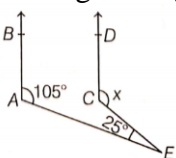
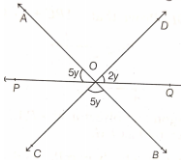9. In the given figure, AOC and BOC form a linear pair. Determine the value of x.

10. In the given figure, if AB||CD, APQ=60° and PRD=137°, then find the values of x and y.

11. In the given figure, if AB||CD, then find the value of x
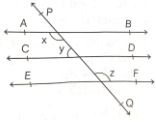

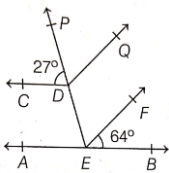12. If AOP=5y, QOD=2y and B0C=5y in the given figure, find the value of y

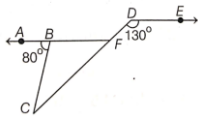13. If one of the angles of a triangle is 130°, then find the angle between the bisectors of the other two angles.

14. In the given figure, if AB∥CD, CD∥EF and y:z=3:7, then find the value of (x+y) and (x+z)

15. In the given figure, EF∥DQ and AB∥CD. If FEB=64° and PDC=27°, then find ∟PDQ, ∟AED and ∟DEF.

16. In the given figure, AB∥DE. Find the value of ∟BCF.
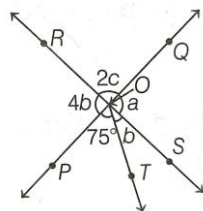

17. It is given that ABC=68° and AB is produced to a point P. Draw a figure from the given information. If ray BQ bisects CBP, then find ABQ and reflex QBP.
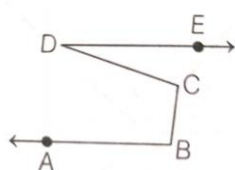
18. In the given figure, lines XY and MN intersect at O. if POY=90° and a:b=2:3 then find the value of c.
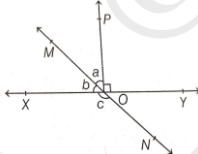
19. In the given figure, two straight line PQ and RS intersect each other at O. if POT=75°, then find the value of a, b and c.

20. In the given figure, AB∥DE. Prove that ABC+BCD=180° + CDE

21. ABCDE is a regular pentagon and bisector of BAE meets CD at M. if bisector of BCD meets AM at P, then find CPM.

22. If the sides of an angle are respectively parallel to the sides of another angle, then prove that these angles are either equal or supplementary.