1) If two adjacent angles add up to 180° , they form a _____ .

2) Two angles whose sum is 90° are _____ angles.
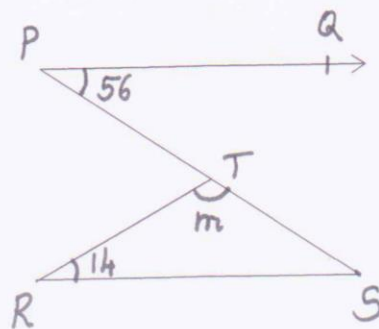
3) Lines PQ and RS intersect at O . If $\angle PQR : \angle ROQ = 5 : 7$, find all the angles.

4) If $2x + 30$ and $2x + 10$ are adjacent angles on a straight line , find x.
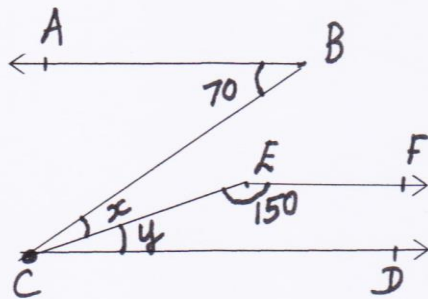
5) In the figure , find $\angle AOC$ and $\angle COF$.
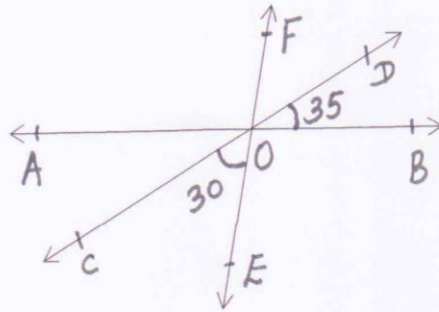
6) In the figure PQ ‖ RS , find $\angle XMY$.
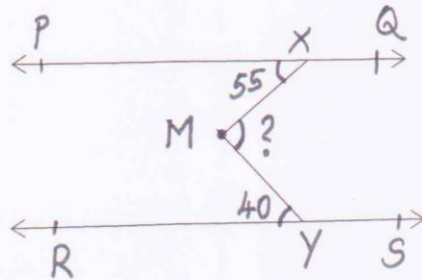
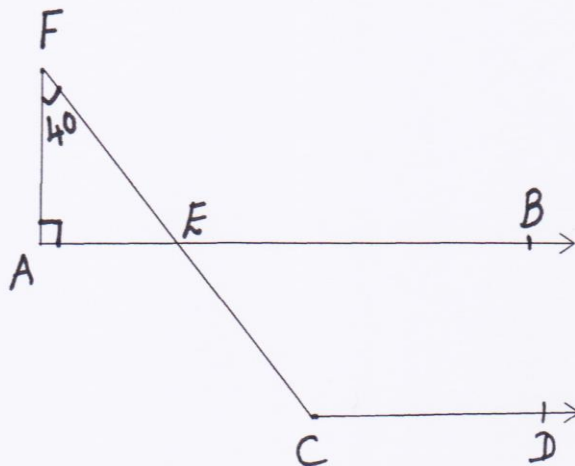7) In the figure PQ ‖ RS , find the value of 'm'.

8) In the figure AB ‖ EF ‖ CD , find x and y.

A ———————— B
70
E   F
150
x
y
C   D

9) In the figure AB ‖ CD , find ∟ECD.
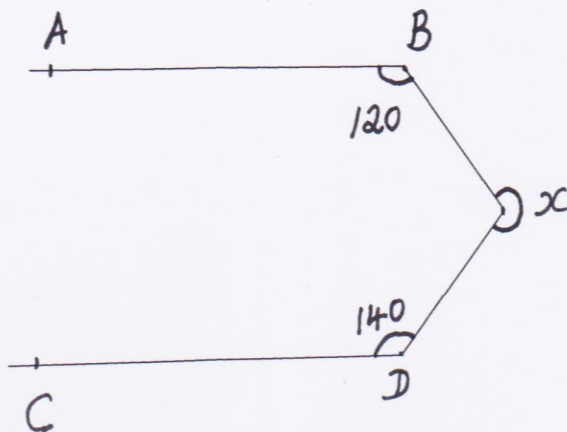
F
40
A   E   B

C   D

10) Write the complement of 90 – a .
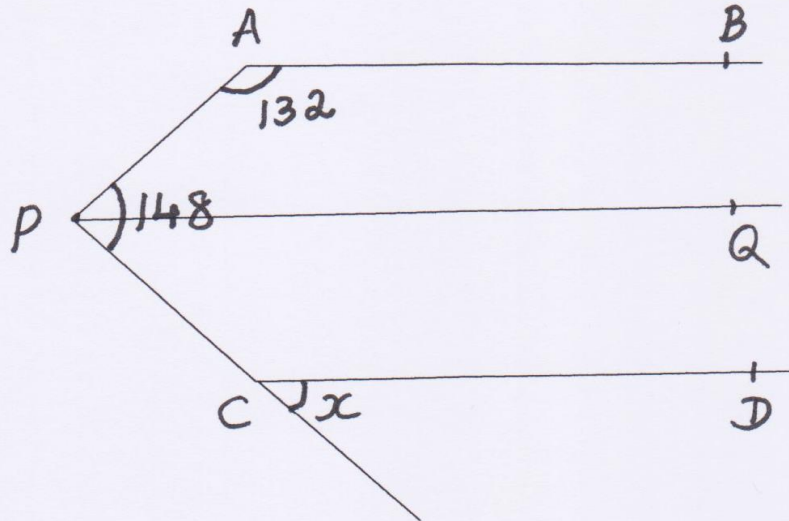11) Write the angle which is the supplement of itself.
12) Two supplementary angles are in the ratio 2 : 3. Find the angles.
13) Prove that if two lines intersect , the vertically opposite angles are equal.

14) If AB ‖ CD , find x in the given figure.

A   B
120
x
140
C   D

15) If AB ∥ PQ ∥ CD in the given figure , find x.

ANSWERS

3) 75° , 105° , 75° , 105°
4) 35
5) 35° & 150°
6) 95°
7) 110°
8) 40° & 30°
9) 130°
10) a
11) 90°
12) 72° , 108°
14) 260°
15) 100°