

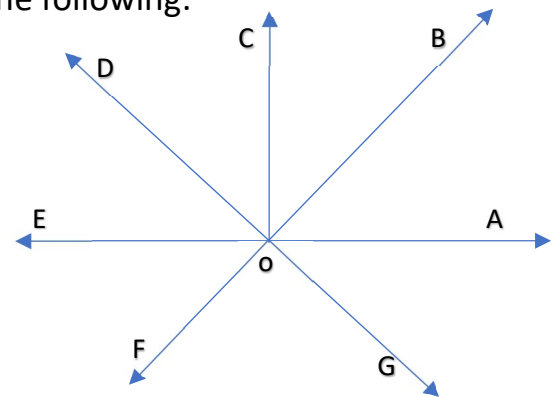
International Indian School, Buraidah

Worksheet for the Academic Year 2023-24

Class: VII Subject: MATHEMATICS Date: 17-09-2023

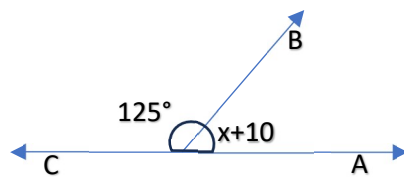
LESSON:5 – Lines and Angles

1. The measure of the angle which is equal to its complement is-----
2. The measure of the angle which is equal to its supplement is-----
3. Find the complement of the following angles:
a) 49° b) 26° c) 18°
4. Find the supplement of the following angles:
a) 109° b) 74° c) 11°
5. With reference to the given diagram, identify the following:
a) Vertically opposite angles
b) Complementary angles
c) Linear pairs
d) Pair of adjacent angles
e) Pair of adjacent complementary angles

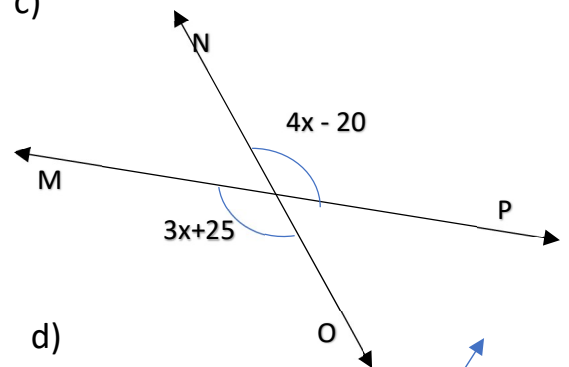


6. Find the values of x and y & z:

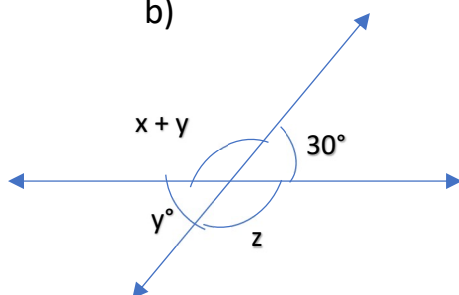
a)



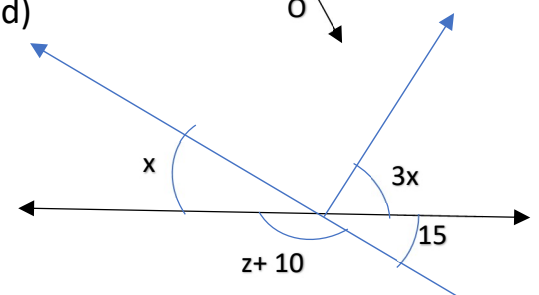
c)



b)

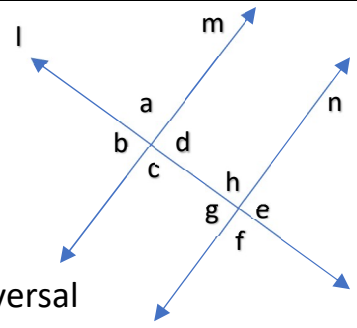


d)

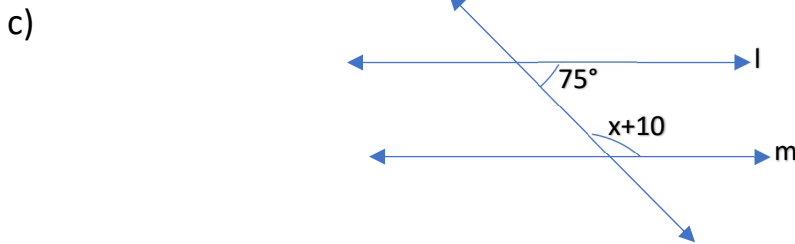
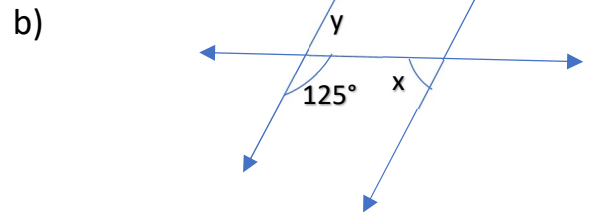
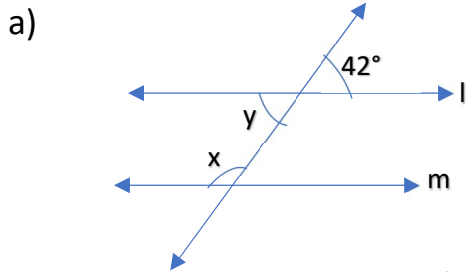


7. From the figure identify:

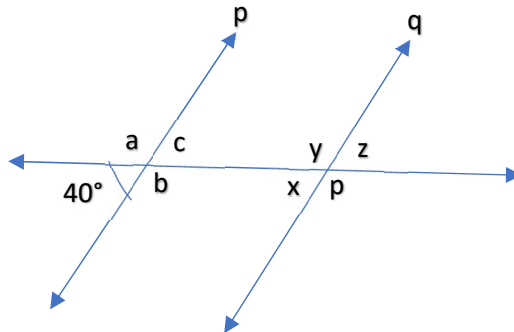
- a) Corresponding angles
- b) Alternate interior angles
- c) Pair of interior angles on the same side of the transversal
- d) Exterior angles



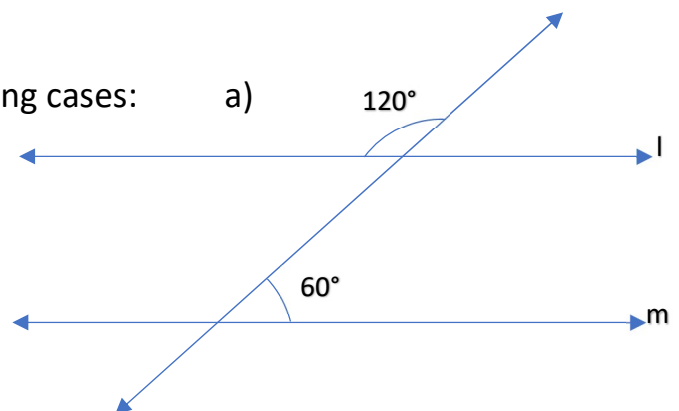
8. If $l \parallel m$, Find the value of x & y

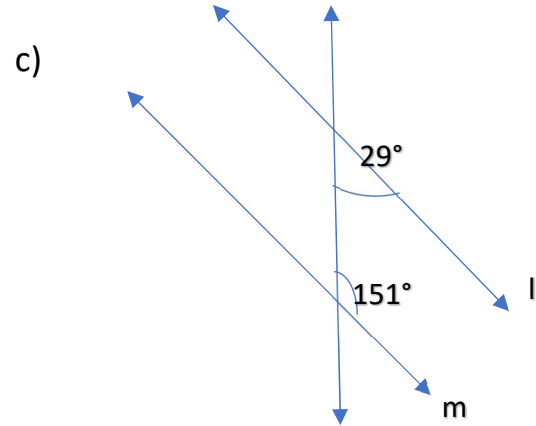
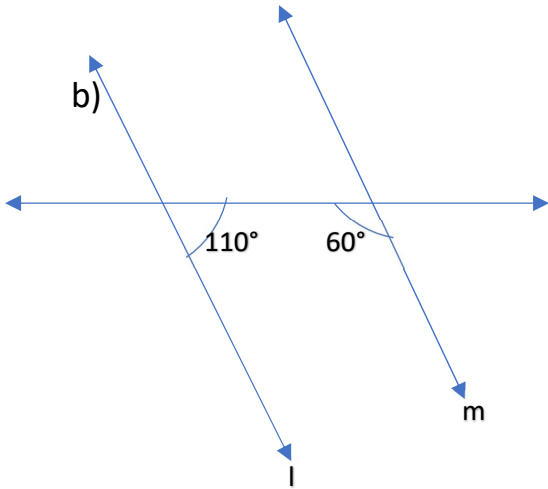


9. If $p \parallel q$, Find the measure of other angles in the given figure:



10. Check whether $l \parallel m$ in the following cases:





Answers:

- 1) 45° 2) 90° 3) a) 41° b) 64° c) 72°
- 4) a) 71° b) 106° c) 169°
- 5) a) $\angle DOF$ & $\angle BOG$, $\angle DOB$ & $\angle GOF$
 b) $\angle EOD$ & $\angle DOC$, $\angle COB$ & $\angle BOA$
 c) $\angle EOD$ & $\angle DOA$, $\angle EOF$ & $\angle FOA$
 d) $\angle EOD$ & $\angle DOC$, $\angle DOC$ & $\angle COB$, $\angle COB$ & $\angle BOA$
 e) $\angle EOD$ & $\angle DOC$, $\angle COB$ & $\angle BOA$
- 6) a) 45° b) $x = 120^\circ, y = 30^\circ$ c) $x = 45^\circ$
- d) $x = 15^\circ, y = 120^\circ, z = 155^\circ$
- 7) a) $\angle a$ & $\angle h$, $\angle b$ & $\angle g$, $\angle c$ & $\angle f$, $\angle d$ & $\angle e$
 b) $\angle d$ & $\angle g$, $\angle c$ & $\angle h$
 c) $\angle c$ & $\angle g$, $\angle d$ & $\angle h$
 d) $\angle a$, $\angle b$, $\angle e$, $\angle f$
- 8) a) $x = 138^\circ, y = 42^\circ$ b) $x = 55^\circ, y = 55^\circ$ c) $x = 95^\circ$
- 9) $\angle a = \angle b = 140^\circ, \angle c = 40^\circ, \angle x = 40^\circ, \angle y = 140^\circ, \angle z = 40^\circ, \angle p = 140^\circ$
- 10) a) Yes b) No c) Yes
