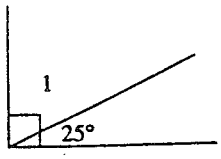
INTERSECTING LINES

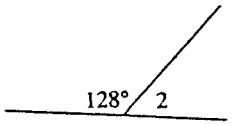
Find the measure of each required angle and give the reason for your answer.

1.



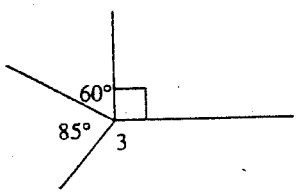
∠1 = 65° 90-25 Complementary

2.



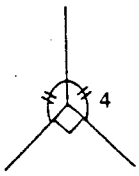
∠2 = 52° 180-128 Supplementary

3.



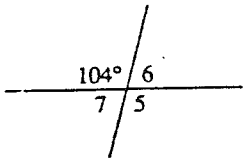
∠3 = 125° 360-90-60-85 ∠s at a point

4.



∠4 = 135 360-90 / 2 , ∠'s at a pt

5.

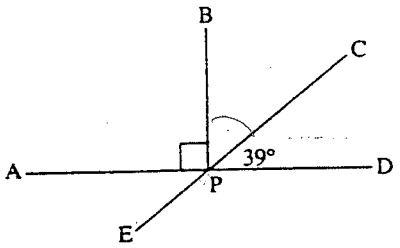


∠5 = 104° vert. opp.

∠6 = 76° supplementary

∠7 = 76° vertically opp ∠6

6.

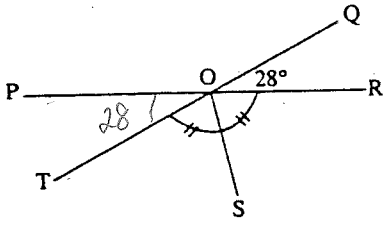


∠BPD = 90° supplementary

∠BPC = 51° complementary

∠APE = 39° angles on a line 180-90-51

7.



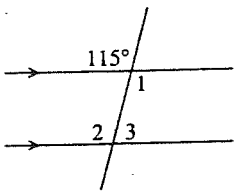
∠POT = 28° vert. opp.

∠POQ = 152° supplementary 180-28

∠ROT = 152° vert opp

∠ROS = 76° equal ∠s, 152 ÷ 2

8.

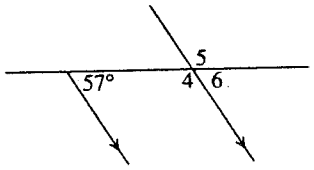


∠1 = 115° vert opp

∠2 = 115° alt. interior

∠3 = 65° supplementary

9.

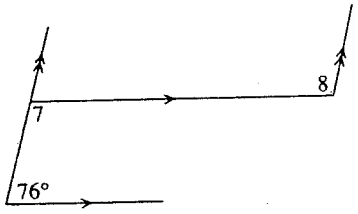


∠4 = 123° int. ∠s add to 180°

∠5 = 123° vert. opp.

∠6 = 57° corresponding or supp.

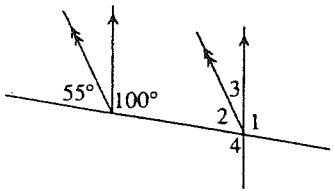
10.



∠7 = 104° int ∠s

∠8 = 104° alt interior

11.



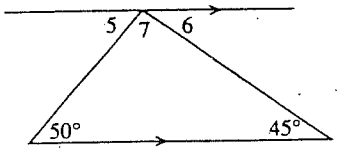
∠1 = 100° corresponding

∠2 = 55° corresponding

∠3 = 25° ∠s on a line 180-100-55

∠4 = 100° vert opp ∠1

12.

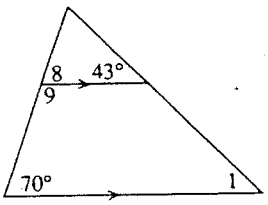


∠5 = 50° alt interior

∠6 = 45° alt interior

∠7 = 85° ∠s on a line 180 - 50 - 45

13.

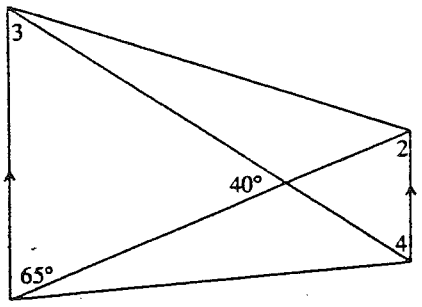


∠8 = 70° corresponding

∠9 = 110° supplementary

∠1 = 43 corresponding

14.

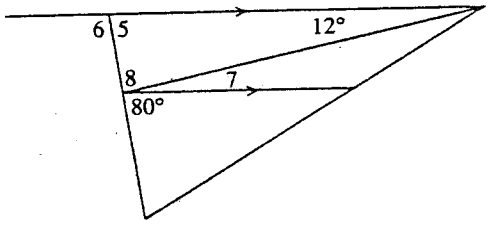


∠2 = 65° alt interior

∠3 = 75° ∠s in triangle

∠4 = 75° alt interior w ∠3
or ∠s in △

15.



∠5 = 80° corresponding

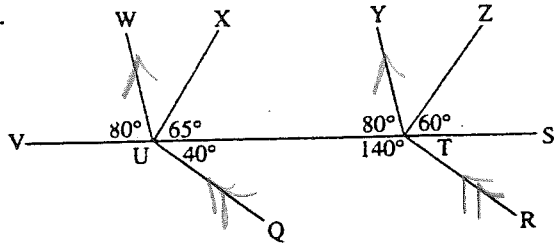
∠6 = 100° supplementary

∠7 = 12° alt interior

∠8 = 88° ∠s on a line
180-80-12

Name 2 pairs of parallel segments in each figure. State the reason for your answer.

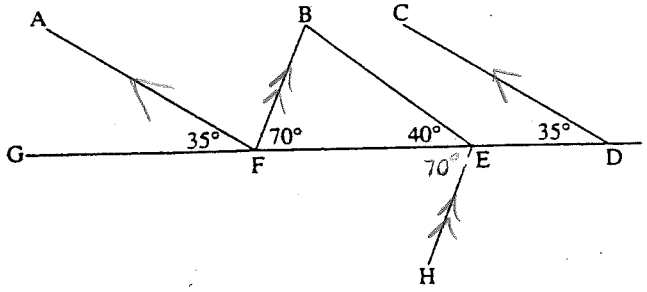
16.



UW || TY corresponding ∠s are = (80°)

QU || RT int angles add to 180°
(40° + 140°)

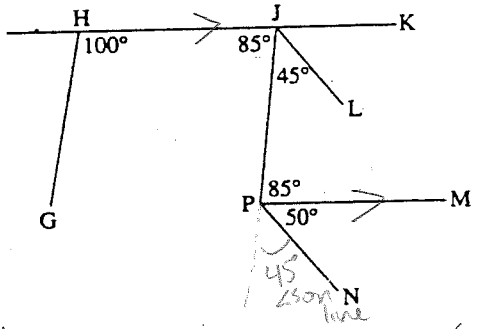
17.



AF || CD corresponding ∠s = (35°)

BF || EH alt int ∠s = (70°)

18.



HK || PM alt int ∠s = (85°)

JL || NP corresponding ∠s = (45°)