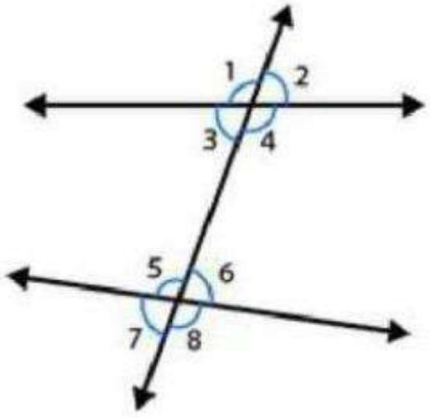
INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2026-27

CLASS: VII SUBJECT: MATHEMATICS DATE: 20-09-2026

Lesson 5: PARALLEL AND INTERSECTING LINES

1. The angle measure between two perpendicular lines is------
2. If two lines are intersected by a transversal, then the number of pairs of corresponding angles is---------
3. A line that intersects two or more lines at distinct points is called----------
4. Sum of interior angles on the same side of the transversal is--------
5. A pair of adjacent angles whose measures add up to form a straight angle is known as a----------
6. ---------- lines are two lines that intersect at a right angle
7. If a transversal cuts two parallel lines, each pair of corresponding angles are------- in measure
8. Find the complementary angles of each of the following:
   a) 20° b) 63° c) 57° d) 80°
9. Find the supplementary angles of the following angles:
   a) 105° b) 154° c) 87° d) 90°
10. Find the angle which is equal to its complement
11. Find the angle which is equal to its supplement
12. From the given figure, write



a) Vertically opposite angles

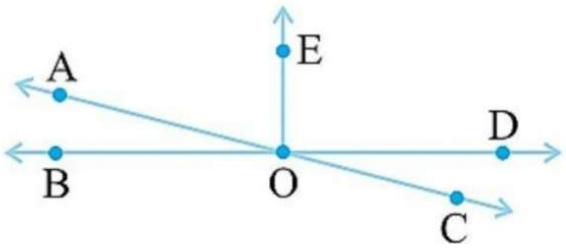
b) Linear pairs

c) Corresponding angles

d) Alternate interior angles

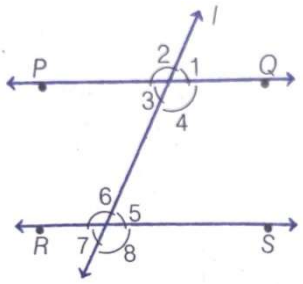
e) Co-interior angles

13. In the adjoining figure, name the following angles:

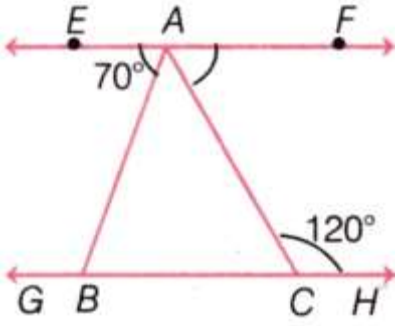


a) Obtuse vertically opposite angles
b) Adjacent complementary angles
c)Equal supplementary angles
d) Unequal supplementary angle
e) Adjacent angles that do not form a linear pair

14. In the given figure, PQ and RS are parallel lines. If ∠1 = (2a + b)° and ∠6 = (3a –b)° , then find the measure of ∠2 in terms of b

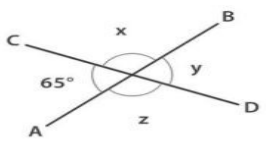


15. In the following figure, EF is parallel to GH, ∠EAB = 70° and ∠ACH = 120°. Then, find ∠CAF and ∠BAC.



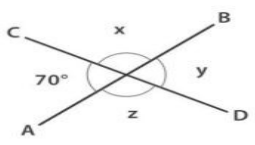
16. Find the angles given below:

(a)



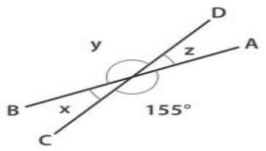
$\angle y =$ ☐°

(b)



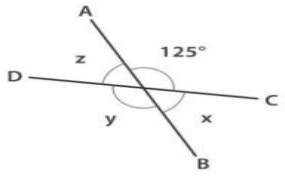
$\angle z =$ ☐°

(c)



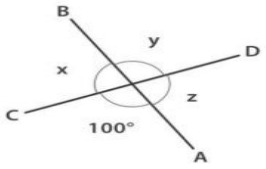
$\angle z =$ ☐°

(d)



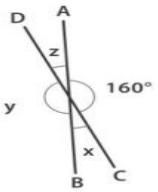
$\angle y =$ ☐°

(e)



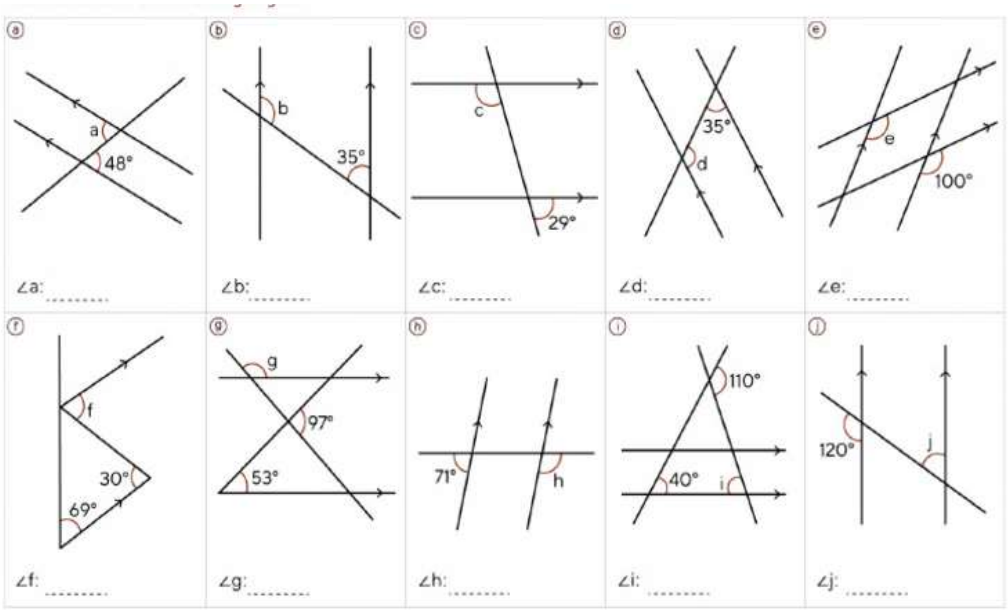
$\angle z =$ ☐°

(f)

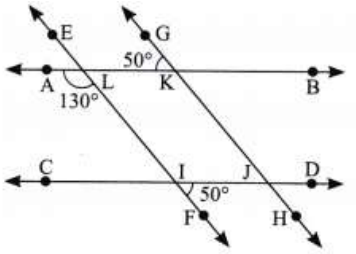


$\angle z =$ ☐°

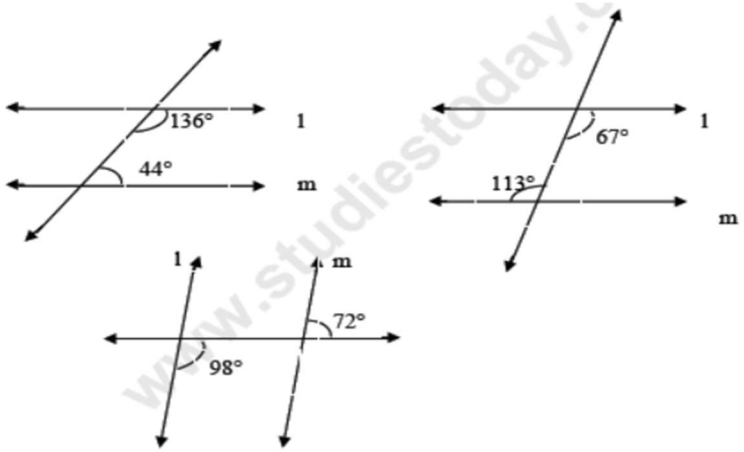
17.Find the unknown angles:



18.Check whether the lines AB and CD are parallel or not



19.Check whether the lines are parallel or not



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Answers:

1. 90° 2. 4 3. Transversal 4. Supplementary (180°)

5. linear pair 6. Perpendicular 7. Equal

8. a) 70° b) 27° c) 33° d) 10°

9. a) 75° b) 26° c) 93° d) 90°

10. 45° 11. 90°

12. a) ∠1 & ∠ 4, ∠2 & ∠ 3, ∠5 & ∠ 8, ∠6 & ∠ 7

b) ∠1 & ∠ 2, ∠2 & ∠ 4, ∠3 & ∠ 4, ∠1 & ∠ 3, ∠5 & ∠ 6, ∠6 & ∠ 8, ∠7 & ∠ 8, ∠5 & ∠ 7

c) ∠1 & ∠ 5, ∠2 & ∠ 6, ∠3 & ∠ 7, ∠4 & ∠ 8

d) ∠3 & ∠ 6, ∠4 & ∠ 5

e) ∠3 & ∠ 5, ∠4 & ∠ 6

13. a) ∠AOD,∠BOC

b) ∠EOA,∠AOB

c)∠EOB,∠EOD

d) ∠AOB,∠AOD

e) ∠AOB,∠AOE,∠AOE,∠EOD, ∠EOD,∠DOC

14. 108°– b

15. 60°, 50°

16. a) y = 65° b) z=110° c) z = 25°

d) y = 125° e) z = 80° f) z = 20°

17. a) ∠ a = 48° b) ∠ b = 145° c) ∠ c= 151°

d) ∠ d = 145° e) ∠e = 100° f) ∠f = 30°

g) ∠g = 136° h) ∠h= 109° i)∠ i = 70°

j) ∠j = 60°

18. Yes

19. a) Yes b) No c) No

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