	INDIAN SCHOOL AL WADI AL KABIR	
Class: XI	**Department: SCIENCE 2025 – 26** **SUBJECT: ENGINEERING GRAPHICS**	**Date: 17/01/2026**
Worksheet No: 6 **WITH ANSWERS**	**UNIT 6: ISOMETRIC PROJECTION**	**Note:** **A4 FILE FORMAT**
NAME OF THE STUDENT	**CLASS & SEC: XI B**	**ROLL NO.**

MULTIPLE CHOICE QUESTIONS

1. The isometric projection of a circle is ----------.
   (a) ellipse
   (b) circle
   (c) sphere
   (d) hemisphere

2. In isometric projection, all three principal axes are inclined at an angle of -------.
   (a) 30 degree
   (b) 45 degree
   (c) 120 degree
   (d) 90 degree

3. The angle difference between the true scale and the isometric scale is -------.
(a)30 degree
(b) 15 degree
(c)45 degree
(d) 60 degree

4. The isometric length is measured in an isometric scale at an angle of ----------.
(a) 90 degree
(b)45 degree
(c) 30 degree
(d) 20 degree

5. The true length is measured in an isometric scale at an angle of ----------.
(a) 15 degree
(b) 90 degree
(c) 45 degree
(d) 30 degree

6. Isometric projection is smaller than actual drawings up to the value --------.
(a) 82 %
(b)90 %
(c)75%
(d)30%

7. The word isometric means----------.
(a) unequal
(b) equal measure
(c) parallel
(d) perpendicular

8. The lines which are parallel to the isometric axes are called----------

(a) Parallel lines
(b) Perpendicular lines
(c) Non-isometric lines
(d) Isometric lines

9. Which of the following is NOT a feature of isometric projection?
(a) All edges are equally foreshortened
(b) Parallel edges remain parallel
(c) True lengths are used directly
(d) Three faces are visible at a time

10. The scale used in isometric projection is called:
(a) Ordinary scale
(b) Plain scale

(c) Isometric scale
(d) Diagonal scale

DIAGRAM-BASED QUESTIONS

1. Draw the isometric projection of a square of 60 mm in HP.

2. Draw the isometric projection of an equilateral triangle of 35 mm in VP.

3. Draw the isometric projection of a pentagon of 30 mm in HP.

4. Draw the isometric projection of a hexagon of 50 mm in VP

5. Draw the isometric projection of a rectangle ABCD having AB = 40 mm and AD = 60 mm, standing on the horizontal plane on one of its sides AB.

6. Draw the isometric projection of a circle of 50 mm diameter having its surface parallel to HP.

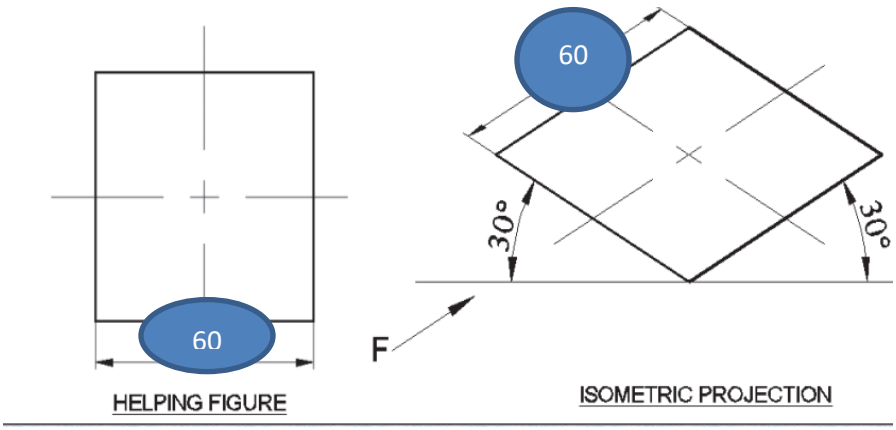
MULTIPLE CHOICE QUESTIONS

ANSWERS

S.NO	ANSWERS
1.	(a) Ellipse
2.	(c) 120 degree
3.	(b) 15 degree
4.	(c) 30 degree
5.	(c) 45 degree
6.	(a) 82%
7.	(b) equal measure
8.	(d) isometric lines
9.	(c) True lengths are used directly
10.	(c) isometric scale

SOLUTIONS FOR DRAWINGS

1.



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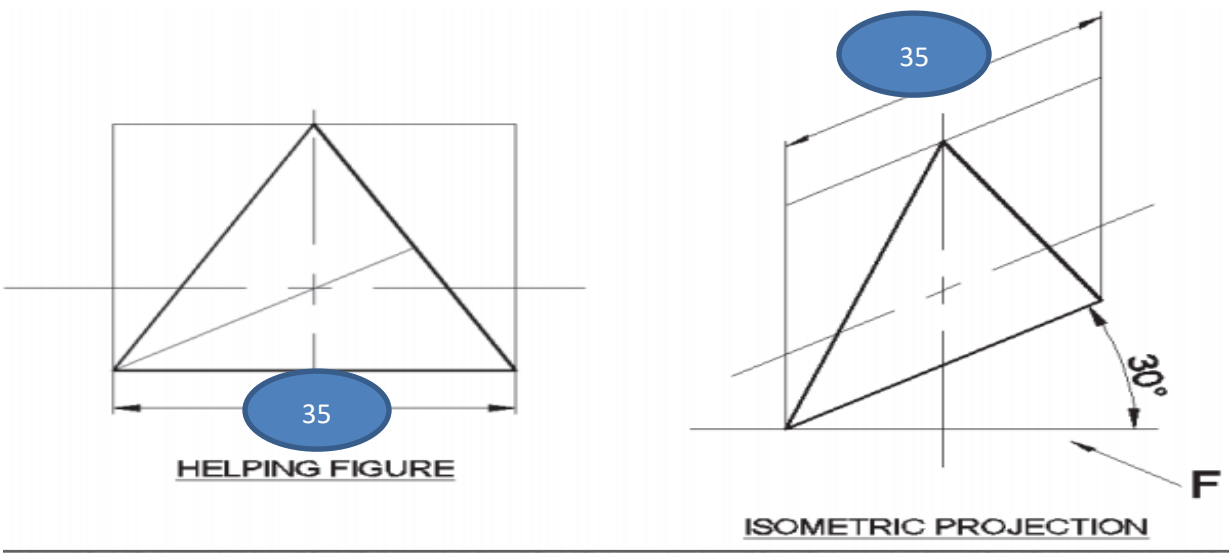

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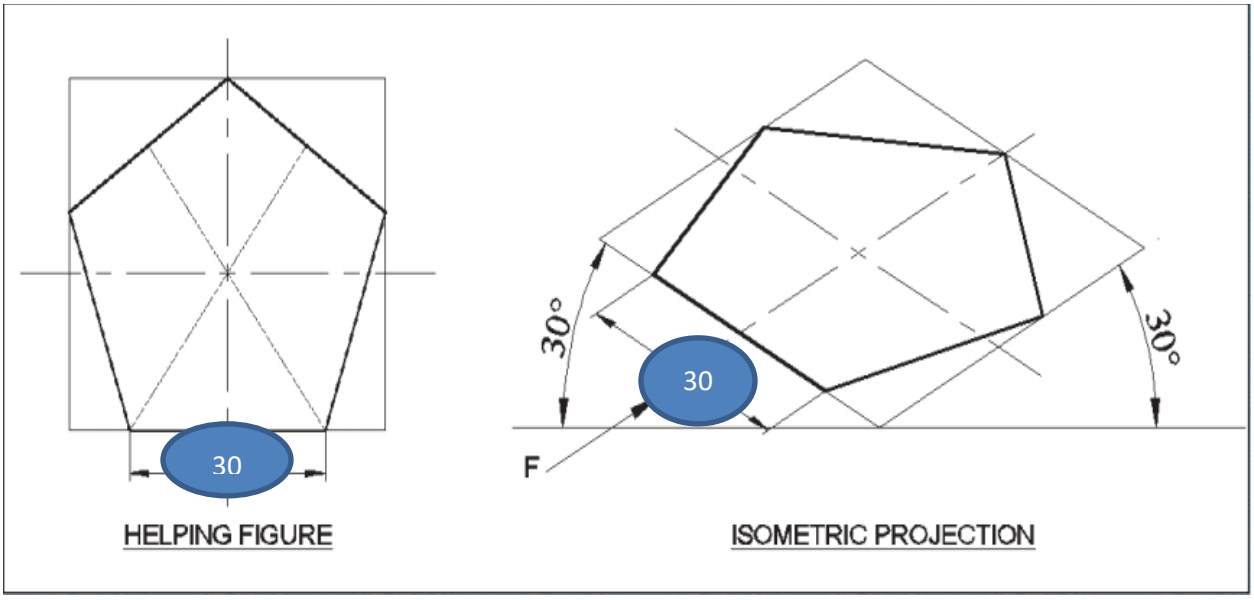
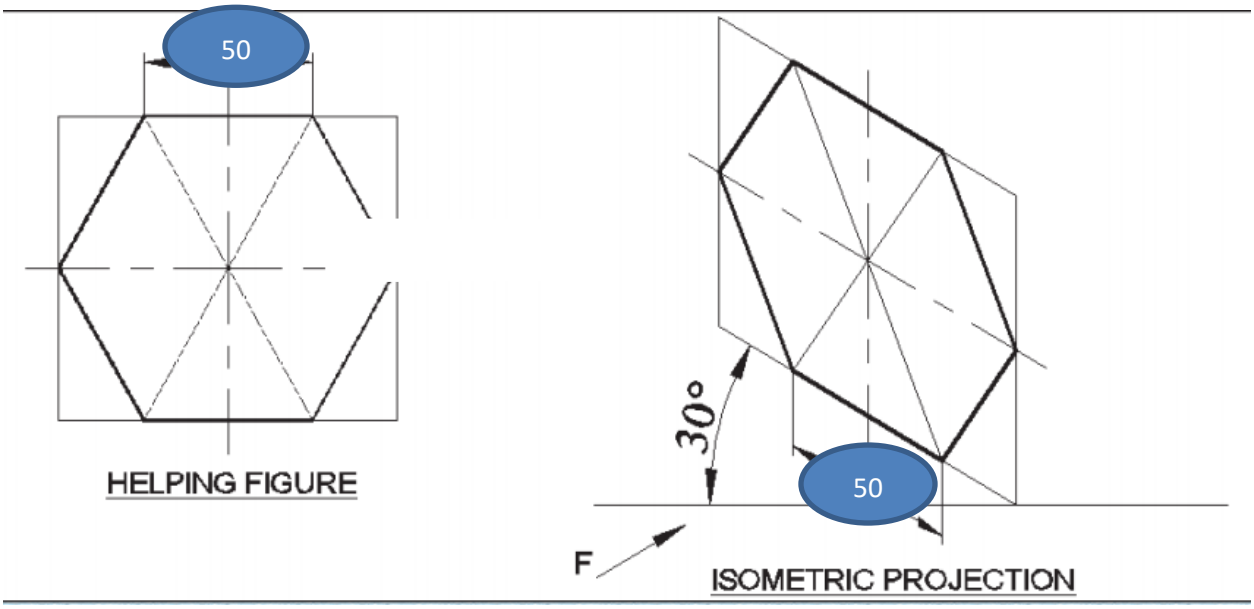
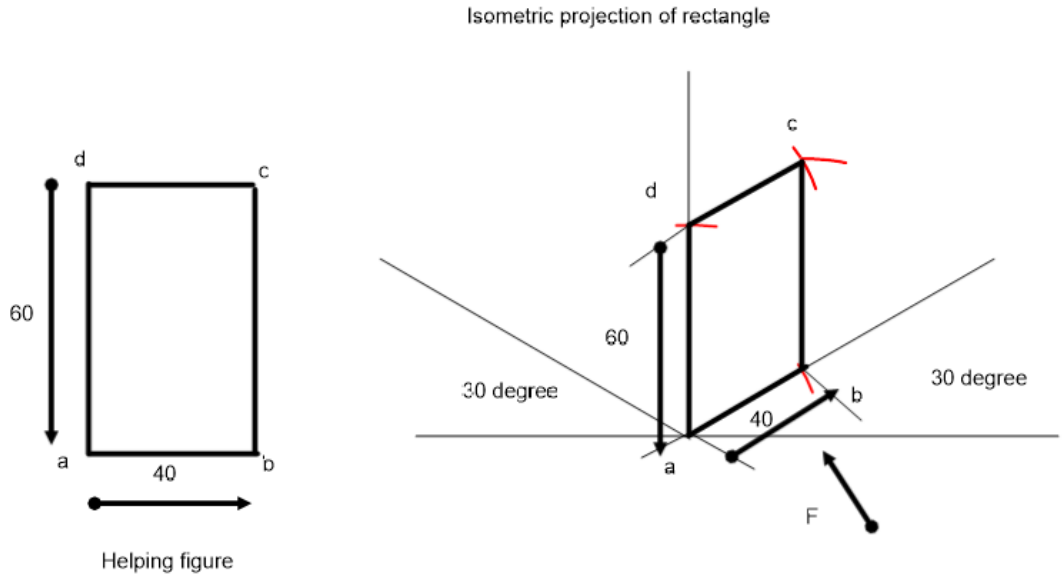

30
30°
30°
30
F
HELPING FIGURE
ISOMETRIC PROJECTION

4.


50
30°
50
F
HELPING FIGURE
ISOMETRIC PROJECTION

5.



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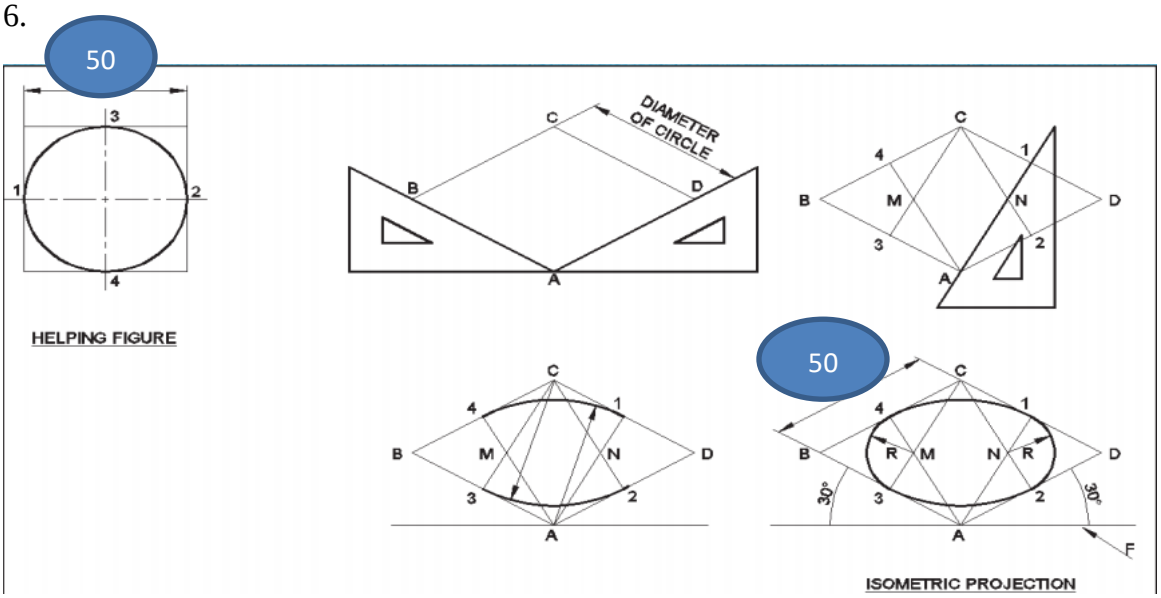

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